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=> b reg
FILE 'REGISTRY' ENTERED AT 15:20:54 ON 13 FEB 2008
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DICTIONARY FILE UPDATES:  12 FEB 2008  HIGHEST RN 1003006-87-8

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http://www.cas.org/support/stngen/stndoc/properties.html

=> d que sta l21
L17            STR
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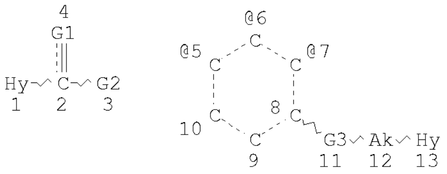

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GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  13

STEREO ATTRIBUTES: NONE
L19      107285 SEA FILE=REGISTRY ABB=ON  PLU=ON  C6/ES AND (NC2NC2 AND
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SEARCH TIME: 00.00.01



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FILE COVERS 1907 - 13 Feb 2008  VOL 148 ISS 7
FILE LAST UPDATED: 12 Feb 2008  (20080212/ED)

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 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

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L24  ANSWER 1 OF 1  HCAPLUS  COPYRIGHT 2008 ACS on STN
AN   2004:370915  HCAPLUS
DN   140:391296
TI   Preparation of aryloxyalkylamine derivatives as H3 receptor ligands
IN   Best, Desmond John; Bruton, Gordon; Heightman, Thomas Daniel; Orlek, Barry
     Sidney
PA   Glaxo Group Limited, UK
SO   PCT Int. Appl., 63 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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             GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
             LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,
             OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
             TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU2003274053         A1    20040513    2003AU-0274053         20031020
     EP---1554260         A1    20050720    2003EP-0758032         20031020
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     JP2006512404         T     20060413    2005JP-0501523         20031020
     US2006052597         A1    20060309    2005US-0532371         20050421
PRAI 2002GB-0024558       A     20021022
     2002GB-0024677       A     20021023
     2002GB-0024678       A     20021023
     2002GB-0024679       A     20021023
     2002GB-0024783       A     20021024
     2003GB-0003467       A     20030214
     2003WO-EP11649       W     20031020
OS   MARPAT 140:391296
GI


* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

AB   The title novel benzyloxy compds. [I; R1 = II (wherein R4a = alkyl, oxo,
     (hetero)aryl, heterocyclyl: R5a = halo, OH, CN, etc.; m = 1-2; p = 0-3;
     when p = 2, said R4a groups may instead form a bridging group consisting
     of 1-2 methylene groups), substituted SO2NH2, III (R4b = alkyl, OH, aryl,
     heterocyclyl; r = 0-2), etc.; R2 = halo, alkyl, alkoxy, CN, NH2, CF3; n =
     0-2; R3 = (CH2)qNR11R12, IV (q = 2-4; R11, R12 = alkyl; NR11R12 =
     heterocyclyl; R13 = alkyl, cycloalkyl, alkylcycloalkyl; R14 = halo, alkyl,
     haloalkyl, OH, dialkylamino, alkoxy; f, k = 0-2; g = 0-2; h = 0-3 (g and h
     cannot both be 0))], useful in the treatment of neurol. and psychiatric
     disorders, were prepared  Thus, reacting 4-[3-(piperidin-1-
     yl)propoxy]benzoic acid hydrochloride with 4-phenylpiperazine afforded V
     which exhibited pKb of >8.5 in the histamine H3 functional antagonist
     assay.  The pharmaceutical composition comprising the compound I is claimed.
IT   685871-07-2P 685871-09-4P 685871-56-1P
     RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); RACT (Reactant or reagent); USES (Uses)
        (preparation of aryloxyalkylamine derivs. as H3 receptor ligands)
IT   685871-06-1P 685871-08-3P 685871-11-8P
     685871-12-9P 685871-13-0P 685871-14-1P
     685871-15-2P 685871-16-3P 685871-17-4P
     685871-18-5P 685871-19-6P 685871-20-9P
     685871-21-0P 685871-22-1P 685871-23-2P
     685871-24-3P 685871-25-4P 685871-26-5P
     685871-27-6P 685871-28-7P 685871-29-8P
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L24  ANSWER 1 OF 1  HCAPLUS  COPYRIGHT 2008 ACS on STN     (Continued)
     685871-30-1P 685871-31-2P 685871-32-3P
     685871-34-5P 685871-37-8P 685871-38-9P
     685871-39-0P 685871-40-3P 685871-41-4P
     685871-42-5P 685871-43-6P 685871-44-7P
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     685871-67-4P 685871-68-5P 685871-69-6P
     685871-70-9P 685871-71-0P 685871-72-1P
     685871-73-2P 685871-74-3P 685871-75-4P
     685871-76-5P 685871-77-6P 685871-78-7P
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     685872-44-0P 685872-45-1P 685872-46-2P
     685872-47-3P 685872-48-4P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (prepn. of aryloxyalkylamine derivs. as H3 receptor ligands)
IT   685873-05-6P, 1-(tert-Butoxycarbonyl)-4-[4-(3-(piperidin-1-
     yl)propoxy)-2-trifluoromethylbenzoyl]piperazine 685873-06-7P,
     1-[4-(3-(Piperidin-1-yl)propoxy)-2-trifluoromethylbenzoyl]piperazine
     dihydrochloride 685873-08-9P 685873-09-0P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation of aryloxyalkylamine derivs. as H3 receptor ligands)
IT   685871-07-2P
     RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); RACT (Reactant or reagent); USES (Uses)
        (preparation of aryloxyalkylamine derivs. as H3 receptor ligands)
RN   685871-07-2  HCAPLUS
CN   Piperazine, 1-[4-[3-(1-piperidinyl)propoxy]benzoyl]-, dihydrochloride
     (9CI)  (CA INDEX NAME)
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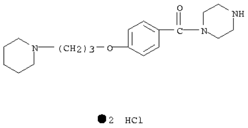

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L32  ANSWER 1 OF 8  HCAPLUS  COPYRIGHT 2008 ACS on STN
AN   2007:33775  HCAPLUS
DN   146:163019
TI   Preparation of piperidinecarboxylates as G protein-coupled receptor
     (GPR119) agonists.
IN   Bradley, Stuart Edward; Fyfe, Matthew Colin Thor; Bertram, Lisa Sarah;
     Gattrell, William; Jeevaratnam, Revathy Perpetua; Keily, John; Procter,
     Martin James; Rasamison, Chrystelle Marie; Rushworth, Philip John;
     Sambrook-Smith, Colin Peter; Stonehouse, David French; Swain, Simon
     Andrew; Williams, Geoffrey Martyn
PA   Prosidion Limited, UK
SO   PCT Int. Appl., 85pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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PI   WO2007003962         A2    20070111    2006WO-GB50178         20060629
     WO2007003962         A3    20070308
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             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP,
             KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN,
             MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU,
             SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG,
             US, UZ, VC, VN, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
PRAI 2005GB-0013277       A     20050630
     2006GB-0005946       A     20060327
OS   MARPAT 146:163019
GI
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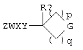

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AB   Title compds. [I; Z = (substituted) Ph, 5-6 membered heteroaryl; W, Y =
     bond, (substituted) alkylene, alkenylene; X = CH2, O, S, CH(OH),
     halomethyl, CF2, CO, CO2, COS, NR5, SO, SO2, etc.; G = CHR3, NCO2R4,
     NCONR4R5, (substituted) N-heterocyclyl, N-heteroaryl, etc.; Rx = H, OH; R3
     = alkyl; R4 = (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, aryl,
     heterocyclyl, etc.; R5 = H, alkyl; p = 0-3; q = 1-5; p+q = 2-5], were
     prepared  Thus, (4-methoxycarbonylbenzyl)triphenylphosphonium bromide in
     dimethoxyethane was treated portionwise with NaH; tert-Bu
     4-(3-oxopropyl)piperidine-1-carboxylate in dimethoxyethane was added
     followed by stirring for 20 h at room temperature to give tert-Bu
     4-[(E)-4-(4-methoxycarbonylphenyl)but-3-enyl]piperidine-1-carboxylate.  I
     in a cell line expressing recombinant human GPR119 generally increased
     intracellular cAMP levels with EC50's of <10 μM.
IT   919359-30-1P 919359-38-9P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of piperidinecarboxylates as G protein-coupled receptor
        (GPR119) agonists)
RN   919359-30-1  HCAPLUS
CN   1-Piperidinecarboxylic acid, 4-[3-[3-fluoro-4-[(4-methyl-1-
     piperazinyl)carbonyl]phenoxy]propyl]-, 1,1-dimethylethyl ester  (CA INDEX
     NAME)
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L32  ANSWER 1 OF 8  HCAPLUS  COPYRIGHT 2008 ACS on STN     (Continued)
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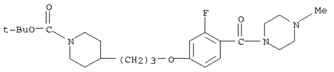

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RN   919359-38-9  HCAPLUS
CN   1-Piperidinecarboxylic acid, 4-[3-[3-fluoro-4-(1-
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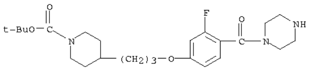

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L32  ANSWER 2 OF 8  HCAPLUS  COPYRIGHT 2008 ACS on STN
AN   2006:844745  HCAPLUS
DN   145:271810
TI   Preparation of pyridyl non-aromatic nitrogenated heterocyclic-1-
     carboxylate ester derivatives as FAAH inhibitors
IN   Ishii, Takahiro; Sugane, Takashi; Maeda, Jun; Narazaki, Fumie; Kakefuda,
     Akio; Sato, Kentaro; Takahashi, Tatsuhisa; Kanayama, Takatoshi; Saitoh,
     Chikashi; Suzuki, Jotaro; Kanai, Chisato
PA   Astellas Pharma Inc., Japan
SO   PCT Int. Appl., 180pp.
     CODEN: PIXXD2
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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PI   WO2006088075         A1    20060824    WO 2006-JP302698       20060216
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             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
             KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,
             MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
             SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
             VN, YU, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
     AU2006215080         A1    20060824    2006AU-0215080         20060216
     CA---2598294         A1    20060824    2006CA-2598294         20060216
     EP---1849773         A1    20071031    2006EP-0713839         20060216
         R:  AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR
     IN2007CN03602        A     20071116    2007IN-CN03602         20070817
     KR2007107122         A     20071106    2007KR-0720924         20070913
PRAI 2005JP-0040197       A     20050217
     2005JP-0303065       A     20051018
     WO 2006-JP302698     W     20060216
OS   MARPAT 145:271810
GI
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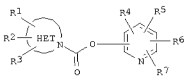

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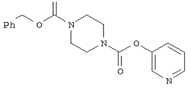

II

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AB   Title compds. I [HET = non-aromatic nitrogenated heterocycle; R1-R3 = H, OH,
     cyano, etc.; R4-R7 = H, halo, OH, etc.] and their pharmaceutically
     acceptable salts were prepared  For example, reaction of 3-pyridyl
     1-piperazinecarboxylate·2HCl with benzyl chloroformate followed by
     treatment with p-toluenesulfonic acid afforded compound II p-toluenesulfonic
     acid salt.  In fatty acid amide hydrolase (FAAH) inhibition assays using
     human bladder epithelial cancer-derived cell, compound II p-toluenesulfonic
     acid salt exhibited the IC50 value of 0.093 nM.  Compds. I are claimed
     useful for the treatment of increased urinary frequency, incontinence,
     etc.
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L32  ANSWER 2 OF 8  HCAPLUS  COPYRIGHT 2008 ACS on STN     (Continued)
IT   906737-06-2P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of pyridyl non-aromatic nitrogenated heterocyclic-1-carboxylate
        ester derivs. as FAAH inhibitors)
RN   906737-06-2  HCAPLUS
CN   1-Piperazinecarboxylic acid, 4-[4-(2-pyridinylmethoxy)benzoyl]-,
     3-pyridinyl ester  (CA INDEX NAME)
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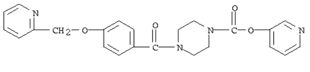

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RE.CNT  30    THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
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L32  ANSWER 3 OF 8  HCAPLUS  COPYRIGHT 2008 ACS on STN
AN   2006:453931  HCAPLUS
DN   144:480417
TI   Reduction of CYP450 inhibition in the 4-[(1H-imidazol-4-
     yl)methyl]piperidine series of histamine H3 receptor antagonists. [Erratum
     to document cited in CA144:246525]
AU   Berlin, Michael; Ting, Pauline C.; Vaccaro, Wayne D.; Aslanian, Robert;
     McCormick, Kevin D.; Lee, Joe F.; Albanese, Margaret M.; Mutahi, Mwangi
     W.; Piwinski, John J.; Shih, Neng-Yang; Duguma, Luli; Solomon, Daniel M.;
     Zhou, Wei; Sher, Rosy; Favreau, Leonard; Bryant, Matthew; Korfmacher,
     Walter A.; Nardo, Cymbelene; West, Robert E.; Anthes, John C.; Williams,
     Shirley M.; Wu, Ren-Long; She, H. Susan; Rivelli, Maria A.; Corboz, Michel
     R.; Hey, John A.
CS   The Schering Plough Research Institute, Kenilworth, NJ, 07033, USA
SO   Bioorganic & Medicinal Chemistry Letters (2006), 16(12), 3342
     CODEN: BMCLE8; ISSN: 0960-894X
PB   Elsevier B.V.
DT   Journal
LA   English
AB   The publisher regrets that Reference 9 was not listed correctly and should
     read: "Vaccaro, W. D.; Sher, R.; Berlin, M.; Shih, N.-Y.; Aslanian, R.;
     Schwerdt, J. H.; McCormick, K. D.; Piwinski, J. J.; West, R. E., Jr.;
     Anthes, J. C.; Williams, S. M.; Wu, R.-L.; She, H. S.; Rivelli, M. A.;
     Mutter, J. C.; Corboz, M. R.; Hey, J. A.; Favreau, L. Bioorg. Med. Chemical
     Lett. 2006, 16, 395.".
IT   877141-93-0P 877141-96-3P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL
     (Biological study); PREP (Preparation)
        (preparation and structure activity relations of imidazolmethylpiperidine H3
        antihistamines with reduced activity towards inhibition of CYP450
        (Erratum))
RN   877141-93-0  HCAPLUS
CN   Piperazine, 1-[4-[3-[4-(1H-imidazol-4-ylmethyl)-1-
     piperidinyl]propoxy]benzoyl]- (9CI)  (CA INDEX NAME)
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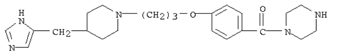

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RN   877141-96-3  HCAPLUS
CN   Piperazine, 1-[4-[3-[4-(1H-imidazol-4-ylmethyl)-1-piperidinyl]-3-
     oxopropoxy]benzoyl]- (9CI)  (CA INDEX NAME)
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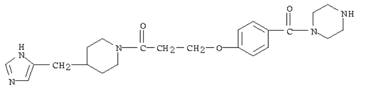

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L32  ANSWER 4 OF 8  HCAPLUS  COPYRIGHT 2008 ACS on STN
AN   2006:333943  HCAPLUS
DN   145:62755
TI   Polymer-Supported Synthesis of Pyridone-Focused Libraries as Inhibitors of
     Anaplastic Lymphoma Kinase
AU   Zhu, Tong; Yan, Zheng; Chucholowski, Alexander; Webb, Thomas R.; Li,
     Rongshi
CS   Department of High Throughput Medicinal Chemistry, ChemBridge Research
     Laboratories, San Diego, CA, 92127, USA
SO   Journal of Combinatorial Chemistry (2006), 8(3), 401-409
     CODEN: JCCHFF; ISSN: 1520-4766
PB   American Chemical Society
DT   Journal
LA   English
AB   Two series of arylpyridonecarboxamides were prepared by solid-phase
     synthesis as potential inhibitors of anaplastic lymphoma kinase.
IT   890652-12-7P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (polymer-supported synthesis of pyridone-focused libraries as
        inhibitors of anaplastic lymphoma kinase)
RN   890652-12-7  HCAPLUS
CN   3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-1,2-dihydro-N-[4-[(4-
     methyl-1-piperazinyl)carbonyl]phenyl]-2-oxo-  (CA INDEX NAME)
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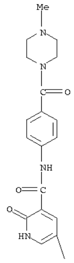
PAGE 1-A



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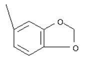

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RE.CNT  16     THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT
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L32  ANSWER 5 OF 8  HCAPLUS  COPYRIGHT 2008 ACS on STN
AN   2006:192756  HCAPLUS
DN   144:274288
TI   Preparation of pyrazolopyrimidine compounds as SK channel blockers
IN   Takamuro, Iwao; Sekine, Yasuo; Tsuboi, Yasunori; Noshiro, Hiroshi;
     Taniguchi, Hiroyuki
PA   Tanabe Seiyaku Co., Ltd., Japan
SO   Jpn. Kokai Tokkyo Koho, 298 pp.
     CODEN: JKXXAF
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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PI   JP2006056884         A     20060302    2005JP-0210978         20050721
PRAI 2004JP-0216519       A     20040723
OS   MARPAT 144:274288
GI
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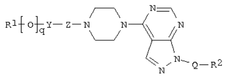

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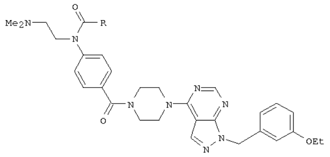

II

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AB   Title compds. I [R1 = substituted aryl, (un)substituted aliphatic
     heteromonocycle containing N, substituted cycloalkyl, etc.; R2 =
     (un)substituted heteroaryl, (un)substituted aryl; Y = single bond,
     alkylene, alkenylene; Z = -CO-, -CH2-, -SO2-, etc.; Q = alkylene; q = 0,
     1] were prepared  For example, hydrolysis of 4-[N-(cyclopropylcarbonyl)-N-[2-
     (dimethylamino)ethyl]amino]benzoic acid Et ester, e.g., prepared from
     4-fluorobenzoic acid Et ester in 3 steps, followed by EDCI mediated
     amidation with 1-(3-ethoxybenzyl)-4-piperazin-1-yl-1H-pyrazolo[3,4-
     d]pyrimidine·2HCl afforded compound II [R = cyclopropyl].  In
     125I-apamin binding inhibition assays, IC50 value of compound II [R =
     methyl] hydrochloride was 0.06 µM.  Compds. I are claimed useful for
     the treatment of irritable bowel disease, Alzheimer type-dementia, etc.
IT   733771-64-7P 733776-46-0P 733778-16-0P
     733780-14-8P 733780-15-9P 733780-16-0P
     733780-17-1P 733780-18-2P 733780-19-3P
     733780-20-6P 733780-21-7P 878135-19-4P
     878135-21-8P 878135-22-9P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of pyrazolopyrimidine compds. as SK channel blockers for
        treatment of irritable bowel disease, Alzheimer type-dementia, etc.)
RN   733771-64-7  HCAPLUS
CN   Piperazine, 1-[1-[(3-ethoxyphenyl)methyl]-1H-pyrazolo[3,4-d]pyrimidin-4-
     yl]-4-[4-[2-(1-piperidinyl)ethoxy]benzoyl]- (9CI)  (CA INDEX NAME)
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L32  ANSWER 5 OF 8  HCAPLUS  COPYRIGHT 2008 ACS on STN     (Continued)
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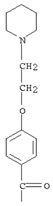

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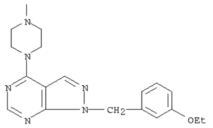

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RN   733776-46-0  HCAPLUS
CN   1-Piperidinebutanamide, N-[4-[[4-[1-[(3-ethoxyphenyl)methyl]-1H-
     pyrazolo[3,4-d]pyrimidin-4-yl]-1-piperazinyl]carbonyl]phenyl]-N-
     (phenylmethyl)-, dihydrochloride (9CI)  (CA INDEX NAME)
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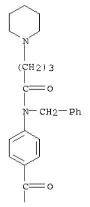
PAGE 1-A



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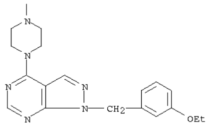
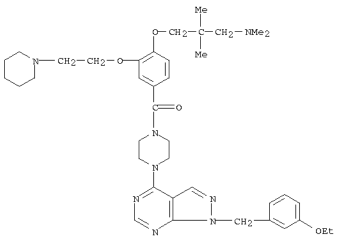


● 2 HCl

RN 733778-16-0 HCAPLUS

CN Piperazine, 1-[4-[3-(dimethylamino)-2,2-dimethylpropoxy]-3-[2-(1-piperidinyl)ethoxy]benzoyl]-4-[1-[(3-ethoxyphenyl)methyl]-1H-pyrazolo[3,4-d]pyrimidin-4-yl]-, dihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A



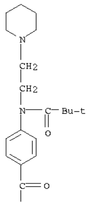
PAGE 2-A

● 2 HCl

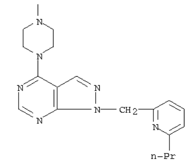
RN 733780-14-8 HCAPLUS

CN Propanamide, 2,2-dimethyl-N-[2-(1-piperidinyl)ethyl]-N-[4-[[4-[1-[(6-propyl-2-pyridinyl)methyl]-1H-pyrazolo[3,4-d]pyrimidin-4-yl]-1-piperazinyl]carbonyl]phenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

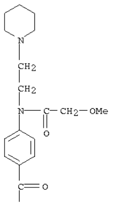


● 2 HCl

RN 733780-15-9 HCAPLUS

CN Acetamide, 2-methoxy-N-[2-(1-piperidinyl)ethyl]-N-[4-[[4-[1-[(6-propyl-2-pyridinyl)methyl]-1H-pyrazolo[3,4-d]pyrimidin-4-yl]-1-piperazinyl]carbonyl]phenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A



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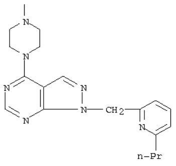
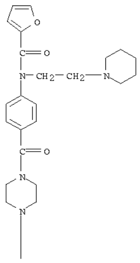


● 2 HCl

RN 733780-16-0 HCAPLUS

CN 2-Furancarboxamide, N-[2-(1-piperidinyl)ethyl]-N-[4-[[4-[1-[(6-propyl-2-pyridinyl)methyl]-1H-pyrazolo[3,4-d]pyrimidin-4-yl]-1-piperazinyl]carbonyl]phenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A



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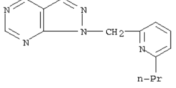
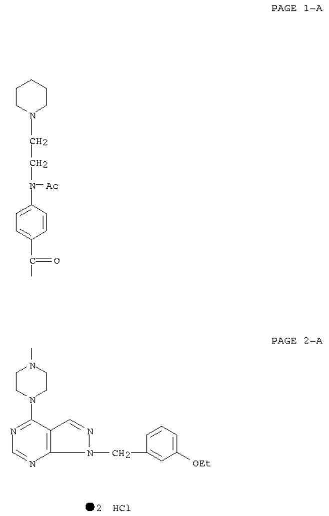


● 2 HCl

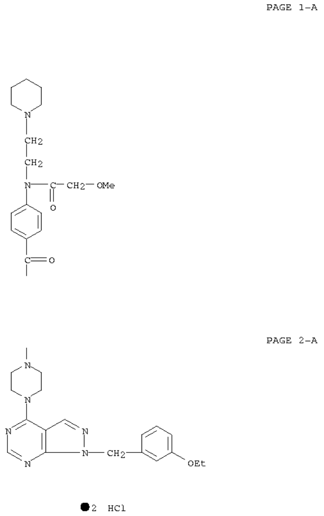
RN 733780-17-1 HCAPLUS

CN Acetamide, N-[4-[[4-[1-[(3-ethoxyphenyl)methyl]-1H-pyrazolo[3,4-d]pyrimidin-4-yl]-1-piperazinyl]carbonyl]phenyl]-N-[2-(1-piperidinyl)ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)



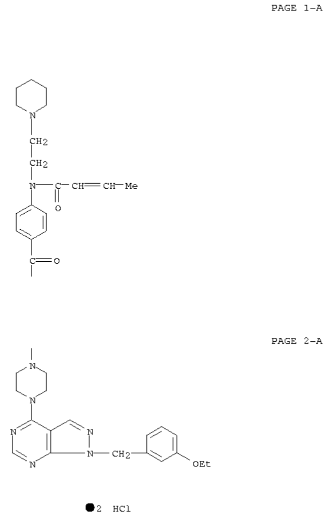
RN 733780-18-2 HCAPLUS

CN Acetamide, N-[4-[[4-[1-[(3-ethoxyphenyl)methyl]-1H-pyrazolo[3,4-d]pyrimidin-4-yl]-1-piperazinyl]carbonyl]phenyl]-2-methoxy-N-[2-(1-piperidinyl)ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)



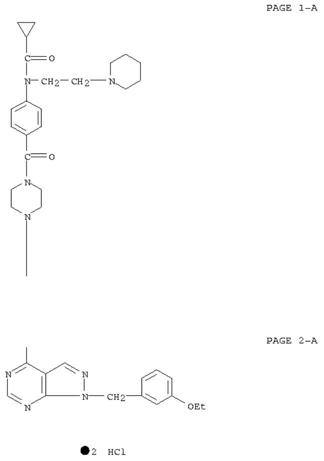
RN 733780-19-3 HCAPLUS

CN 2-Butenamide, N-[4-[[4-[1-[(3-ethoxyphenyl)methyl]-1H-pyrazolo[3,4-d]pyrimidin-4-yl]-1-piperazinyl]carbonyl]phenyl]-N-[2-(1-piperidinyl)ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)



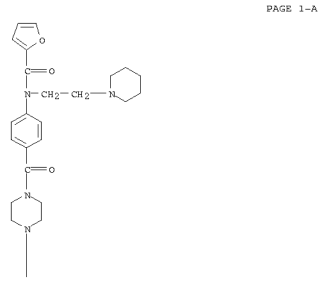
RN 733780-20-6 HCAPLUS

CN Cyclopropanecarboxamide, N-[4-[[4-[1-[(3-ethoxyphenyl)methyl]-1H-pyrazolo[3,4-d]pyrimidin-4-yl]-1-piperazinyl]carbonyl]phenyl]-N-[2-(1-piperidinyl)ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)



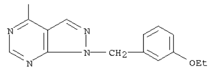
RN 733780-21-7 HCAPLUS

CN 2-Furancarboxamide, N-[4-[[4-[1-[(3-ethoxyphenyl)methyl]-1H-pyrazolo[3,4-d]pyrimidin-4-yl]-1-piperazinyl]carbonyl]phenyl]-N-[2-(1-piperidinyl)ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)



L32 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)

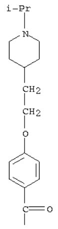
PAGE 2-A



● 2 HCl

RN 878135-19-4 HCAPLUS
CN Piperazine, 1-[1-[(3-ethoxyphenyl)methyl]-1H-pyrazolo[3,4-d]pyrimidin-4-yl]-4-[4-[2-[1-(1-methylethyl)-4-piperidinyl]ethoxy]benzoyl]-, monohydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A



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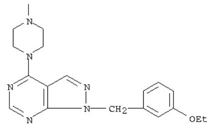
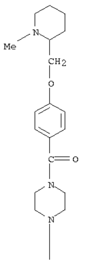


● HCl

L32 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)
RN 878135-21-8 HCAPLUS
CN Piperazine, 1-[1-[(3-ethoxyphenyl)methyl]-1H-pyrazolo[3,4-d]pyrimidin-4-yl]-4-[4-[(1-methyl-2-piperidinyl)methoxy]benzoyl]-, monohydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A



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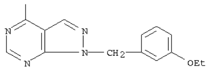
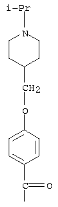


● HCl

RN 878135-22-9 HCAPLUS
CN Piperazine, 1-[1-[(3-ethoxyphenyl)methyl]-1H-pyrazolo[3,4-d]pyrimidin-4-yl]-4-[4-[[1-(1-methylethyl)-4-piperidinyl]methoxy]benzoyl]-, monohydrochloride (9CI) (CA INDEX NAME)

L32 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 1-A



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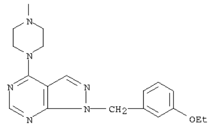

● HCl

L32 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:104503 HCAPLUS
DN 144:192119
TI Preparation of substituted arylamine derivatives, particularly 2-aminonicotinamides, as antitumor agents
IN Yuan, Chester Chenguang; Yang, Kevin; Vanderplas, Simon; Riahi, Babak; Potashman, Michele; Patel, Vinod F.; Nomak, Rana; Li, Aiwen; Huang, Qi; Harmange, Jean-Christophe; Askew, Benny C., Jr.
PA Amgen Inc., USA
SO PCT Int. Appl., 351 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

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PI   WO2006012374         A1     20060202    2005WO-US25800          20050720
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
             LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,
             NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
             SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
             ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
     US2006040966         A1     20060223    2005US-0185556          20050719
     AU2005267161         A1     20060202    2005AU-0267161          20050720
     CA---2571627         A1     20060202    2005CA-2571627          20050720
     EP---1773817         A1     20070418    2005EP-0791799          20050720
         R:  AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL,
             BA, HR, MK, YU
PRAI 2004US-590544P       P      20040722
     2005US-0185556       A2     20050719
     2005WO-US25800       W      20050720
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OS MARPAT 144:192119
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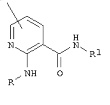

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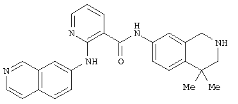

II

AB Title compds. I [R = (un)substituted 9- or 10-membered heterocyclyl selected from 7-isoquinolinyl, 1-oxo-2,3-dihydrobenzofuran-4-yl, 1,6-naphthyridin-3-yl, etc.; R1 = (un)substituted Ph, 5-6 membered heteroaryl, 9-10 membered bicyclic heterocyclyl, 11-14 membered tricyclic heterocyclyl; R2 = H, halo, halo/alkyl], and their analogs, and their pharmaceutically acceptable derivs., are prepared and disclosed as agents effective for treatment of angiogenesis and related diseases such as cancer. Thus, acylation of 7-amino-4,4-dimethyl-3,4-dihydro-1H-

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L32  ANSWER 6 OF 8  HCAPLUS  COPYRIGHT 2008 ACS on STN     (Continued)
     isoquinoline-2-carboxylic acid tert-Bu ester with 2-chloropyridine-3-
     carbonyl chloride, followed by amination of the chloride intermediate (no
     data) with 7-aminoisoquinoline and deprotection gave amide II•HCl.
     Selected I inhibited VEGF-stimulated HUVEC proliferation at a level below
     1 µM.  In the tumor model, I are active at doses less than 150 mpk.
IT   442846-74-4P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (intermediate; preparation of substituted aminonicotinamides as antitumor
        agents)
RN   442846-74-4  HCAPLUS
CN   1-Piperazinecarboxylic acid, 4-[3-[[(2-fluoro-3-pyridinyl)carbonyl]amino]-
     5-(trifluoromethyl)benzoyl]-, 1,1-dimethylethyl ester  (CA INDEX NAME)
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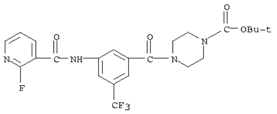

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RE.CNT  4     THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
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L32  ANSWER 7 OF 8  HCAPLUS  COPYRIGHT 2008 ACS on STN
AN   2006:16640  HCAPLUS
DN   144:246525
TI   Reduction of CYP450 inhibition in the 4-[(1H-imidazol-4-
     yl)methyl]piperidine series of histamine H3 receptor antagonists
AU   Berlin, Michael; Ting, Pauline C.; Vaccaro, Wayne D.; Aslanian, Robert;
     McCormick, Kevin D.; Lee, Joe F.; Albanese, Margaret M.; Mutahi, Mwangi
     W.; Piwinski, John J.; Shih, Neng-Yang; Duguma, Luli; Solomon, Daniel M.;
     Zhou, Wei; Sher, Rosy; Favreau, Leonard; Bryant, Matthew; Korfmacher,
     Walter A.; Nardo, Cymbelene; West, Robert E.; Anthes, John C.; Williams,
     Shirley M.; Wu, Ren-Long; She, H. Susan; Rivelli, Maria A.; Corboz, Michel
     R.; Hey, John A.
CS   The Schering Plough Research Institute, Kenilworth, NJ, 07033, USA
SO   Bioorg. Med. Chem. Lett. (2006), 16(4), 989-994
     CODEN: BMCLE8; ISSN: 0960-894X
PB   Elsevier B.V.
DT   Journal
LA   English
AB   A novel series of histamine H3 receptor antagonists based on the
     4-[(1H-imidazol-4-yl)methyl]piperidine template displaying low CYP2D6 and
     CYP3A4 inhibitory profiles has been identified.  Structural features
     responsible for the reduction of P 450 activity, a typical liability of
     4-substituted imidazoles, have been established.
IT   877141-93-0P 877141-96-3P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL
     (Biological study); PREP (Preparation)
        (preparation and structure activity relations of imidazolmethylpiperidine H3
        antihistamines with reduced activity towards inhibition of CYP450)
RN   877141-93-0  HCAPLUS
CN   Piperazine, 1-[4-[3-[4-(1H-imidazol-4-ylmethyl)-1-
     piperidinyl]propoxy]benzoyl]- (9CI)  (CA INDEX NAME)
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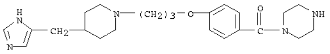

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RN   877141-96-3  HCAPLUS
CN   Piperazine, 1-[4-[3-[4-(1H-imidazol-4-ylmethyl)-1-piperidinyl]-3-
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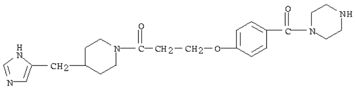

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IT   925415-75-4P 925439-00-5P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and structure activity relations of imidazolmethylpiperidine H3
        antihistamines with reduced activity towards inhibition of CYP450)
RN   925415-75-4  HCAPLUS
CN   1-Propanone, 3-[4-(1-piperazinylcarbonyl)phenoxy]-1-[4-[[1-
     (triphenylmethyl)-1H-imidazol-4-yl]methyl]-1-piperidinyl]-  (CA INDEX
     NAME)
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L32  ANSWER 7 OF 8  HCAPLUS  COPYRIGHT 2008 ACS on STN     (Continued)
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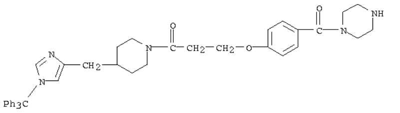

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RN   925439-00-5  HCAPLUS
CN   1-Piperazinecarboxylic acid, 4-[4-[3-[4-[[1-(triphenylmethyl)-1H-imidazol-
     4-yl]methyl]-1-piperidinyl]propoxy]benzoyl]-, 1,1-dimethylethyl ester  (CA
     INDEX NAME)
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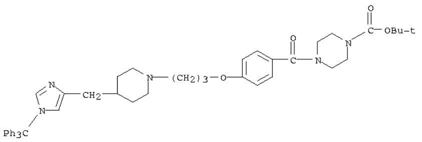

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RE.CNT  11    THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
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L32  ANSWER 8 OF 8  HCAPLUS  COPYRIGHT 2008 ACS on STN
AN   2004:633436  HCAPLUS
DN   141:174191
TI   Preparation of pyrazolopyrimidines as a small conductance potassium
     channel (SK channel) blocking agents
IN   Takamuro, Iwao; Sekine, Yasuo; Tsuboi, Yasunori; Nogi, Kouji; Taniguchi,
     Hiroyuki
PA   Tanabe Seiyaku Co., Ltd., Japan
SO   PCT Int. Appl., 306 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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PI   WO2004064721         A2    20040805    2004WO-JP00617         20040123
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             GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK,
             LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO
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     CN---1742013         A     20060301    CN 2004-80002601       20040123
     EP---1857459         A2    20071121    2007EP-0015684         20040123
     EP---1857459         A3    20071128
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     US2006135525         A1    20060622    2005US-0542081         20050713
PRAI 2003JP-0016770       A     20030124
     2003JP-0205341       A     20030801
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GI
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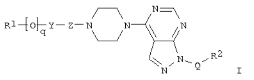

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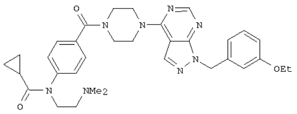

II

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AB   The title compds. [I; R1 = substituted aryl, (un)substituted
     nitrogen-containing aliphatic heteromonocyclyl, substituted cycloalkyl,
     (un)substituted amino, or substituted heteroaryl; R2 = (un)substituted
     (hetero)aryl; Y = a single bond, alkylene or alkenylene; Z = CO, CH2, SO2,
     C:N(CN); Q = alkylene; q = 0-1] and their pharmaceutically acceptable
     salts, which have a small conductance potassium channel (SK channel)
     blocking activity, were prepared  Thus, treating Et 4-{N-
     (cyclopropylcarbonyl)-N-[2-(dimethylamino)ethyl]amino}benzoate (preparation
     given) with 2N NaOH solution followed by treatment with 2N HCl, and the
     reaction of the resulting acid with 1-(3-ethoxybenzyl)-4-(piperazin-1-yl)-
     1H-pyrazol[3,4-d]pyrimidine dihydrochloride afforded 84% II which showed
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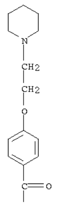
L32 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)
an excellent apamin-binding inhibitory activity (IC50 of 0.05 μM). The pharmaceutical compn. comprising the compd. I is claimed.

IT 733771-64-7P 733774-64-6P 733774-66-8P
733774-67-9P 733776-46-0P 733778-16-0P
733780-14-8P 733780-15-9P 733780-16-0P
733780-17-1P 733780-18-2P 733780-19-3P
733780-20-6P 733780-21-7P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of pyrazolopyrimidines as a small conductance potassium channel (SK channel) blocking agents)

RN 733771-64-7 HCAPLUS
CN Piperazine, 1-[1-[(3-ethoxyphenyl)methyl]-1H-pyrazolo[3,4-d]pyrimidin-4-yl]-4-[4-[2-(1-piperidinyl)ethoxy]benzoyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



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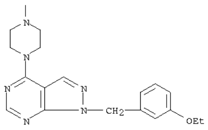
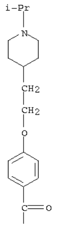


RN 733774-64-6 HCAPLUS
CN Piperazine, 1-[1-[(3-ethoxyphenyl)methyl]-1H-pyrazolo[3,4-d]pyrimidin-4-yl]-4-[4-[2-[1-(1-methylethyl)-4-piperidinyl]ethoxy]benzoyl]-, hydrochloride (9CI) (CA INDEX NAME)

L32 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 1-A



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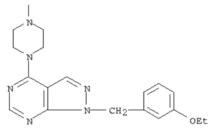
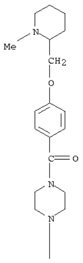


●x HCl

RN 733774-66-8 HCAPLUS
CN Piperazine, 1-[1-[(3-ethoxyphenyl)methyl]-1H-pyrazolo[3,4-d]pyrimidin-4-yl]-4-[4-[(1-methyl-2-piperidinyl)methoxy]benzoyl]-, hydrochloride (9CI) (CA INDEX NAME)

L32 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 1-A



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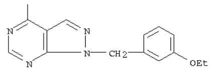
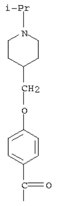


●x HCl

RN 733774-67-9 HCAPLUS
CN Piperazine, 1-[1-[(3-ethoxyphenyl)methyl]-1H-pyrazolo[3,4-d]pyrimidin-4-yl]-4-[4-[[1-(1-methylethyl)-4-piperidinyl]methoxy]benzoyl]-, hydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A



L32 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)

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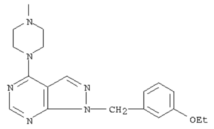
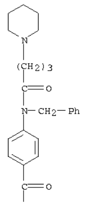


●x HCl

RN 733776-46-0 HCAPLUS
CN 1-Piperidinebutanamide, N-[4-[[4-[1-[(3-ethoxyphenyl)methyl]-1H-pyrazolo[3,4-d]pyrimidin-4-yl]-1-piperazinyl]carbonyl]phenyl]-N-(phenylmethyl)-, dihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A



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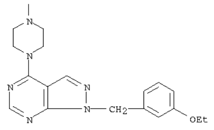


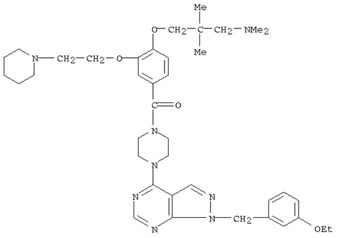
●2 HCl

L32 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 733778-16-0 HCAPLUS

CN Piperazine, 1-[4-[3-(dimethylamino)-2,2-dimethylpropoxy]-3-[2-(1-piperidinyl)ethoxy]benzoyl]-4-[1-[(3-ethoxyphenyl)methyl]-1H-pyrazolo[3,4-d]pyrimidin-4-yl]-, dihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A



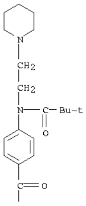
PAGE 2-A

●2 HCl

RN 733780-14-8 HCAPLUS

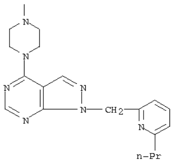
CN Propanamide, 2,2-dimethyl-N-[2-(1-piperidinyl)ethyl]-N-[4-[[4-[1-[(6-propyl-2-pyridinyl)methyl]-1H-pyrazolo[3,4-d]pyrimidin-4-yl]-1-piperazinyl]carbonyl]phenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A



L32 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 2-A

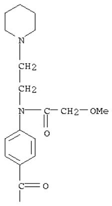


●2 HCl

RN 733780-15-9 HCAPLUS

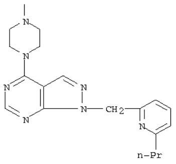
CN Acetamide, 2-methoxy-N-[2-(1-piperidinyl)ethyl]-N-[4-[[4-[1-[(6-propyl-2-pyridinyl)methyl]-1H-pyrazolo[3,4-d]pyrimidin-4-yl]-1-piperazinyl]carbonyl]phenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A



L32 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 2-A

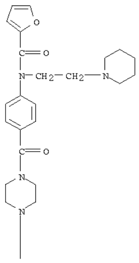


●2 HCl

RN 733780-16-0 HCAPLUS

CN 2-Furancarboxamide, N-[2-(1-piperidinyl)ethyl]-N-[4-[[4-[1-[(6-propyl-2-pyridinyl)methyl]-1H-pyrazolo[3,4-d]pyrimidin-4-yl]-1-piperazinyl]carbonyl]phenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A



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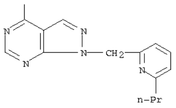


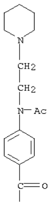
●2 HCl

RN 733780-17-1 HCAPLUS

L32 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)

CN Acetamide, N-[4-[[4-[1-[(3-ethoxyphenyl)methyl]-1H-pyrazolo[3,4-d]pyrimidin-4-yl]-1-piperazinyl]carbonyl]phenyl]-N-[2-(1-piperidinyl)ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A



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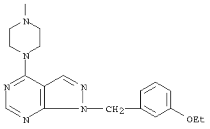


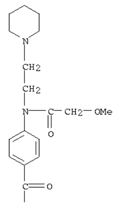
●2 HCl

RN 733780-18-2 HCAPLUS

CN Acetamide, N-[4-[[4-[1-[(3-ethoxyphenyl)methyl]-1H-pyrazolo[3,4-d]pyrimidin-4-yl]-1-piperazinyl]carbonyl]phenyl]-2-methoxy-N-[2-(1-piperidinyl)ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)

L32 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 1-A



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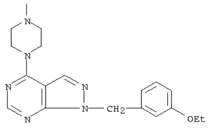


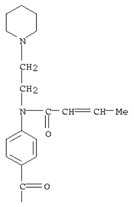
● 2 HCl

RN 733780-19-3 HCAPLUS

CN 2-Butenamide, N-[4-[[4-[1-[(3-ethoxyphenyl)methyl]-1H-pyrazolo[3,4-d]pyrimidin-4-yl]-1-piperazinyl]carbonyl]phenyl]-N-[2-(1-piperidinyl)ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)

L32 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 1-A



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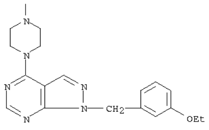


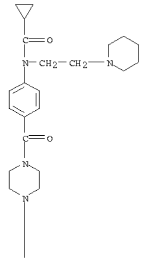
● 2 HCl

RN 733780-20-6 HCAPLUS

CN Cyclopropanecarboxamide, N-[4-[[4-[1-[(3-ethoxyphenyl)methyl]-1H-pyrazolo[3,4-d]pyrimidin-4-yl]-1-piperazinyl]carbonyl]phenyl]-N-[2-(1-piperidinyl)ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)

L32 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 1-A



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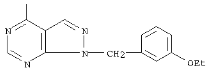
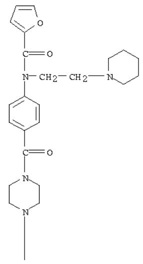


● 2 HCl

RN 733780-21-7 HCAPLUS

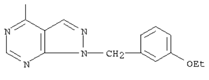
CN 2-Furancarboxamide, N-[4-[[4-[1-[(3-ethoxyphenyl)methyl]-1H-pyrazolo[3,4-d]pyrimidin-4-yl]-1-piperazinyl]carbonyl]phenyl]-N-[2-(1-piperidinyl)ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A



L32 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 2-A



● 2 HCl

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L26  ANSWER 1 OF 15  HCAPLUS  COPYRIGHT 2008 ACS on STN
AN   2003:950057  HCAPLUS
DN   140:16647
TI   Preparation of 2-aminopyridine-3-carboxamides as remedies for angiogenesis
     mediated diseases
IN   Askew, Benny; Adams, Jeffrey; Booker, Shon; Chen, Guoqing; DiPietro,
     Lucian V.; Elbaum, Daniel; Germain, Julie; Geuns-Meyer, Stephanie D.;
     Habgood, Gregory J.; Handley, Michael; Huang, Qi; Kim, Tae-seong; Li,
     Aiwen; Nishimura, Nobuko; Nomak, Rana; Patel, Vinod F.; Riahi, Babak; Kim,
     Joseph L.; Xi, Ning; Yang, Kevin; Yuan, Chester Chenguang
PA   Amgen Inc., USA
SO   U.S. Pat. Appl. Publ., 252 pp., Cont.-in-part of U.S. Ser. No. 46,681.
     CODEN: USXXCO
DT   Patent
LA   English
FAN.CNT 2
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PI   US2003225106         A1    20031204    2002US-0197974         20020717 <--
     US---6878714         B2    20050412
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     US---6995162         B2    20060207
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             UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU2003252011         A1    20040202    2003AU-0252011         20030715 <--
     AU2003252011         B2    20071122
     EP---1537084         A1    20050608    2003EP-0764794         20030715 <--
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     JP2006501195         T     20060112    2004JP-0521959         20030715 <--
     BG----108012         A     20041130    2003BG-0108012         20030721 <--
     US2005261313         A1    20051124    2004US-0014184         20041215 <--
     MX2005PA00584        A     20050419    2005MX-PA00584         20050113 <--
     US2006040956         A1    20060223    2005US-0234713         20050923 <--
     AU2006200437         A1    20060223    2006AU-0200437         20060201 <--
PRAI 2001US-261339P       P     20010112  <--
     2001US-323764P       P     20010919  <--
     2002US-0046681       A2    20020110  <--
     2002AU-0248340       A3    20020111  <--
     2002EP-0717325       A3    20020111  <--
     2002US-0197974       A     20020717  <--
     2003WO-US22417       W     20030715
OS   MARPAT 140:16647
GI
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L26  ANSWER 1 OF 15  HCAPLUS  COPYRIGHT 2008 ACS on STN     (Continued)
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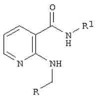

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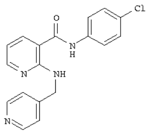

II

```
AB   The title compds. [I; R = (un)substituted 4-pyridyl, 2-pyridyl,
     4-pyrimidinyl, 4-quinolyl, etc.; R1 = (un)substituted aryl, cycloalkyl,
     5-6 membered heteroaryl, 9-10 membered bicyclic and 11-14 membered
     tricyclic heterocyclyl], which are effective for prophylaxis and treatment
     of diseases and other maladies or conditions involving, cancer and the
     like, were prepared  Thus, the title compound II was prepared from
     2-aminonicotinic acid, 4-chloroaniline, and 4-pyridinecarboxaldehyde.  The
     compds. I showed inhibition of KDR kinase at < 50 μM.  Many compds. I
     inhibited VEGF-stimulated HUVEC proliferation at a level below 50 nM.
     Pharmaceutical composition comprising the compound I is claimed.
IT   453561-82-5P 453563-43-4P 453563-44-5P
     453565-22-5P 453565-23-6P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of 2-aminopyridine-3-carboxamides for treating angiogenesis
        mediated diseases)
RN   453561-82-5  HCAPLUS
CN   3-Pyridinecarboxamide, N-[3-(1-piperazinylcarbonyl)-5-
     (trifluoromethyl)phenyl]-2-[(4-pyridinylmethyl)amino]-  (CA INDEX NAME)
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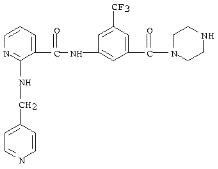

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RN   453563-43-4  HCAPLUS
CN   1-Piperazinecarboxylic acid, 4-[3-[[[2-[(4-pyridinylmethyl)amino]-3-
     pyridinyl]carbonyl]amino]-5-(trifluoromethyl)benzoyl]-, 1,1-dimethylethyl
     ester  (CA INDEX NAME)
```

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L26  ANSWER 1 OF 15  HCAPLUS  COPYRIGHT 2008 ACS on STN     (Continued)
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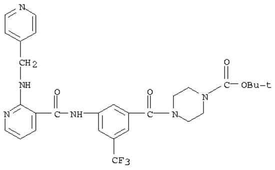

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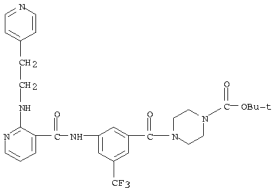
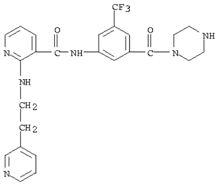
RN   453563-44-5  HCAPLUS
CN   1-Piperazinecarboxylic acid, 4-[3-[[[2-[[2-(4-pyridinyl)ethyl]amino]-3-
     pyridinyl]carbonyl]amino]-5-(trifluoromethyl)benzoyl]-, 1,1-dimethylethyl
     ester  (CA INDEX NAME)
```



```
RN   453565-22-5  HCAPLUS
CN   3-Pyridinecarboxamide, N-[3-(1-piperazinylcarbonyl)-5-
     (trifluoromethyl)phenyl]-2-[[2-(3-pyridinyl)ethyl]amino]-  (CA INDEX NAME)
```



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RN   453565-23-6  HCAPLUS
CN   1-Piperazinecarboxylic acid, 4-[3-[[[2-[[2-(3-pyridinyl)ethyl]amino]-3-
     pyridinyl]carbonyl]amino]-5-(trifluoromethyl)benzoyl]-, 1,1-dimethylethyl
     ester  (CA INDEX NAME)
```

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L26  ANSWER 1 OF 15  HCAPLUS  COPYRIGHT 2008 ACS on STN     (Continued)
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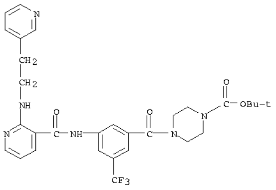

```
IT   442846-74-4P, 2-Fluoro-N-[3-((4-Boc-piperazin-1-yl)carbonyl)-5-
     trifluoromethylphenyl]nicotinamide
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation of 2-aminopyridine-3-carboxamides for treating angiogenesis
        mediated diseases)
RN   442846-74-4  HCAPLUS
CN   1-Piperazinecarboxylic acid, 4-[3-[[(2-fluoro-3-pyridinyl)carbonyl]amino]-
     5-(trifluoromethyl)benzoyl]-, 1,1-dimethylethyl ester  (CA INDEX NAME)
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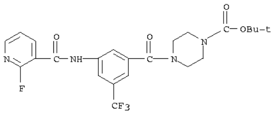

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RE.CNT  39    THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
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L26  ANSWER 2 OF 15  HCAPLUS  COPYRIGHT 2008 ACS on STN
AN   2003:855655  HCAPLUS
DN   139:350636
TI   Preparation of amino heteroaryl amides for use in pharmaceutical
     compositions for the treatment of angiogenesis mediated diseases such as
     cancer
IN   Patel, Vinod F.; Askew, Benny; Booker, Shon; Chen, Guoqing; Dipietro,
     Lucian V.; Germain, Julie; Habgood, Gregory J.; Huang, Qi; Kim, Tae-seong;
     Li, Aiwen; Nishimura, Nobuko; Nomak, Rana; Riahi, Babak; Yuan, Chester
     Chenguang; Elbaum, Daniel
PA   Amgen Inc., USA
SO   U.S. Pat. Appl. Publ., 148 pp., Cont.-in-part of U.S. Ser. No. 46,622.
     CODEN: USXXCO
DT   Patent
LA   English
FAN.CNT 2
     PATENT NO.          KIND   DATE       APPLICATION NO.        DATE
     ---------------     ----   --------   --------------------   --------
PI   US2003203922         A1    20031030   2002US-0197918         20020717 <--
     US---7102009         B2    20060905
     US2003195230         A1    20031016   2002US-0046622         20020110 <--
     US---7105682         B2    20060912
     CN---1538836         A     20041020   2002CN-0806467         20020111 <--
     ZA2003005198         A     20040630   2003ZA-0005198         20030704 <--
     CA---2492045         A1    20040122   2003CA-2492045         20030715 <--
     WO2004007481         A2    20040122   2003WO-US22275         20030715 <--
     WO2004007481         A3    20040219
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
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             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU2003263784         A1    20040202   2003AU-0263784         20030715 <--
     AU2003263784         B2    20070719
     EP---1562933         A2    20050817   2003EP-0764755         20030715 <--
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     JP2006502118         T     20060119   2004JP-0521922         20030715 <--
     MX2005PA00659        A     20050331   2005MX-PA00659         20050114 <--
     US2006194848         A1    20060831   2006US-0417329         20060502 <--
PRAI 2001US-261882P       P     20010112  <--
     2001US-323808P       P     20010919  <--
     2002US-0046622       A2    20020110  <--
     2002US-0197918       A     20020717  <--
     2003WO-US22275       W     20030715
OS   MARPAT 139:350636
GI
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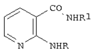

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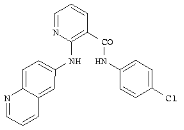

II

```
AB   Amino substituted heteroaryl amides, such as I [R = nitrogen containing
     heteroaryl, such as quinolinyl, isoquinolinyl, indazolyl; R1 = aryl,
     cycloalkyl, heteroaryl, heterocyclyl], were prepared for therapeutic use.
```

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L26  ANSWER 2 OF 15  HCAPLUS  COPYRIGHT 2008 ACS on STN     (Continued)
     The invention encompasses novel compds., analogs, prodrugs and
     pharmaceutically acceptable salts thereof, pharmaceutical compns. and
     methods for prophylaxis and treatment of cancer, angiogenesis related
     disorders, KDR-related disorders, cell proliferation related disorders,
     inflammation, reducing blood flow in tumors, reducing tumor size and
     diabetic retinopathy.  Thus, amide II was prepd. via an amination reaction
     of 2-chloronicotinic acid with 6-aminoquinoline followed by an amidation
     reaction of the aminonicotinic acid deriv. thus formed with
     4-chloroaniline.  Biol. evaluations included HUVEC proliferation assay,
     inhibition of angiogenesis in the rat corneal neovascularization
     micropocket model, and antitumor activity using A431 rat tumor cells.
IT   442846-74-4P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation of aminopyridinecarboxamides for therapeutic use in treatment
        of angiogenesis mediated diseases such as cancer)
RN   442846-74-4  HCAPLUS
CN   1-Piperazinecarboxylic acid, 4-[3-[[(2-fluoro-3-pyridinyl)carbonyl]amino]-
     5-(trifluoromethyl)benzoyl]-, 1,1-dimethylethyl ester  (CA INDEX NAME)
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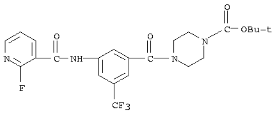

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RE.CNT  84    THERE ARE 84 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
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L26  ANSWER 3 OF 15  HCAPLUS  COPYRIGHT 2008 ACS on STN
AN   2003:551181  HCAPLUS
DN   139:117339
TI   Preparation of substituted arylamine derivatives as antitumor agents
IN   Elbaum, Daniel; Askew, Benny; Booker, Shon; Germain, Julie; Habgood,
     Gregory; Handley, Michael; Kim, Tae-Seong; Li, Aiwen; Nishimura, Nobuko;
     Patel, Vinod F.; Yuan, Chester Chenguang; Kim, Joseph L.
PA   Amgen Inc., USA
SO   U.S. Pat. Appl. Publ., 106 pp., Cont.-in-part of U.S. Ser. No. 46,526.
     CODEN: USXXCO
DT   Patent
LA   English
FAN.CNT 2
     PATENT NO.          KIND   DATE       APPLICATION NO.        DATE
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PI   US2003134836         A1    20030717   2002US-0197960         20020717 <--
     US2002147198         A1    20021010   2002US-0046526         20020110 <--
     CA---2492164         A1    20040122   2003CA-2492164         20030715 <--
     WO2004007457         A2    20040122   2003WO-US22276         20030715 <--
     WO2004007457         A3    20050804
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU2003256577         A1    20040202   2003AU-0256577         20030715 <--
     EP---1583744         A2    20051012   2003EP-0764756         20030715 <--
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     JP2006505511         T     20060216   2004JP-0521923         20030715 <--
     US2004204437         A1    20041014   2004US-0823809         20040412 <--
     US---7101868         B2    20060905
     US2005153960         A1    20050714   2004US-0996035         20041122 <--
     MX2005PA00651        A     20050331   2005MX-PA00651         20050114 <--
PRAI 2001US-261360P       P     20010112  <--
     2001US-323686P       P     20010919  <--
     2002US-0046526       A2    20020110  <--
     2002US-0197960       A     20020717  <--
     2003WO-US22276       W     20030715
     2004US-0823809       A1    20040412
OS   MARPAT 139:117339
GI
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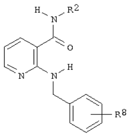

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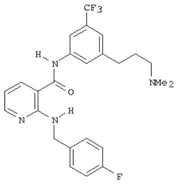

II

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AB   The title compds. I [R2 = (un)substituted Ph, 9-10 membered bicyclic and
     11-14 membered tricyclic (un)saturated heterocyclyl; R8 = halo, NH2, NO2,
     etc.], and their pharmaceutically acceptable derivs., are prepared and
     disclosed as agents effective for prophylaxis and treatment of diseases,
     such as angiogenesis mediated diseases.  E.g., a multi-step synthesis of
     II, starting from 1-dimethylamino-2-propyne and 3-bromo-5-
     trifluoromethylaniline, was given.  Selected compds. of the invention,
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L26  ANSWER 3 OF 15  HCAPLUS  COPYRIGHT 2008 ACS on STN     (Continued)
     e.g., II, inhibited VEGF-stimulated cell proliferation at a level below 50
     nM.  The invention encompasses novel compds., analogs, prodrugs and
     pharmaceutically acceptable derivs. thereof, pharmaceutical compns. and
     methods for prophylaxis and treatment of diseases and other maladies or
     conditions involving, cancer and the like.
IT   442846-74-4P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (intermediate; preparation of substituted aminopyridines as antitumor
        agents)
RN   442846-74-4  HCAPLUS
CN   1-Piperazinecarboxylic acid, 4-[3-[[(2-fluoro-3-pyridinyl)carbonyl]amino]-
     5-(trifluoromethyl)benzoyl]-, 1,1-dimethylethyl ester  (CA INDEX NAME)
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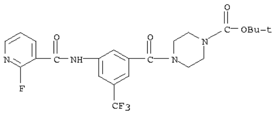

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L26  ANSWER 4 OF 15  HCAPLUS  COPYRIGHT 2008 ACS on STN
AN   2002:847770  HCAPLUS
DN   137:353063
TI   Preparation of piperazines as antidiabetic agents
IN   Maruta, Katsunori; Iwai, Kiyotaka; Yoshida, Kozo; Nagata, Tatsu
PA   Sumitomo Pharmaceuticals Co., Ltd., Japan
SO   Jpn. Kokai Tokkyo Koho, 32 pp.
     CODEN: JKXXAF
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.          KIND   DATE       APPLICATION NO.        DATE
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PI   JP2002322163         A     20021108   2001JP-0123655         20010420 <--
PRAI 2001JP-0123655             20010420  <--
OS   MARPAT 137:353063
GI
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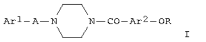
I

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AB   The compds. I (Ar1 = substituted Ph, (un)substituted monocyclic
     heteroaryl, dicyclic aryl, dicyclic heteroaryl; Ar2 = (un)substituted
     phenylene, dicyclic arylene, monocyclic heteroarylene, dicyclic
     heteroarylene; A = methylene, ethylene; R = XYAr3; X = C1-3 alkylene; Y =
     single bond, NR1, O; R1 = H, Me, Et; Ar3 = (un)substituted Ph, monocyclic
     heteroaryl, dicyclic aryl, dicyclic heteroaryl) or their pharmaceutically
     acceptable salts are prepared  2-(5-Ethyl-2-pyridyl)ethanol was esterified
     with mesyl chloride in the presence of Et3N in THF at room temperature for 1 h
     and reacted with 4-[[4-[4-(trifluoromethyl)benzyl]-1-
     piperazinyl]carbonyl]phenol in the presence of K2CO3 in DMF at 100°
     for 5 h to give 63% 1-[4-[2-(5-ethyl-2-pyridyl)ethoxy]benzoyl]-4-[4-
     (trifluoromethyl)benzyl]piperazine, which was administered in mice at 128
     mg/kg/day, resulting in blood glucose level 522.3±89.4 mg/dL, while
     548.8±61.6 mg/dL at 0 mg/kg/day.
IT   474658-87-2P 474658-93-0P 474659-01-3P
     474659-12-6P 474659-14-8P 474659-16-0P
     474659-17-1P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of piperazines as antidiabetic agents)
RN   474658-87-2  HCAPLUS
CN   Piperazine, 1-[4-[2-(5-ethyl-2-pyridinyl)ethoxy]benzoyl]-4-[[4-
     (trifluoromethyl)phenyl]methyl]- (9CI)  (CA INDEX NAME)
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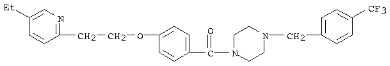

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RN   474658-93-0  HCAPLUS
CN   Piperazine, 1-[4-(2-pyridinylmethoxy)benzoyl]-4-[[4-
     (trifluoromethyl)phenyl]methyl]- (9CI)  (CA INDEX NAME)
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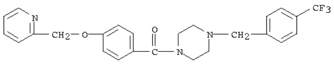

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L26  ANSWER 4 OF 15  HCAPLUS  COPYRIGHT 2008 ACS on STN     (Continued)
RN   474659-01-3  HCAPLUS
CN   Piperazine, 1-[4-[2-(5-ethyl-2-pyridinyl)ethoxy]benzoyl]-4-[[2-
     (trifluoromethyl)phenyl]methyl]- (9CI)  (CA INDEX NAME)
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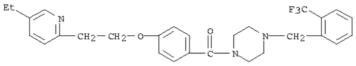

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RN   474659-12-6  HCAPLUS
CN   Piperazine, 1-[4-[3-(2-pyridinyl)propoxy]benzoyl]-4-[[4-
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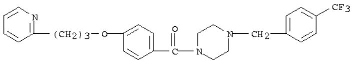

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RN   474659-14-8  HCAPLUS
CN   Piperazine, 1-[4-[2-(2-pyridinyl)ethoxy]benzoyl]-4-[[4-
     (trifluoromethyl)phenyl]methyl]- (9CI)  (CA INDEX NAME)
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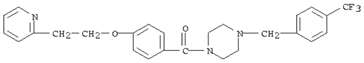

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RN   474659-16-0  HCAPLUS
CN   Piperazine, 1-[4-[3-(3-pyridinyl)propoxy]benzoyl]-4-[[4-
     (trifluoromethyl)phenyl]methyl]- (9CI)  (CA INDEX NAME)
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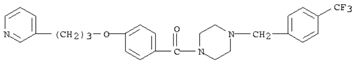

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RN   474659-17-1  HCAPLUS
CN   Piperazine, 1-[4-[3-(4-pyridinyl)propoxy]benzoyl]-4-[[4-
     (trifluoromethyl)phenyl]methyl]- (9CI)  (CA INDEX NAME)
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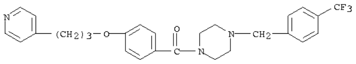

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L26  ANSWER 5 OF 15  HCAPLUS  COPYRIGHT 2008 ACS on STN
AN   2002:736215  HCAPLUS
DN   137:247488
TI   Preparation of C-organooxy- and N-substituted aniline and diphenylamine
     analogs as phosphodiesterase 4 inhibitors useful for enhancing cognition
IN   Hopper, Allen; Schumacher, Richard A.; Tehim, Ashok; De Vivo, Michael;
     Brubaker, William Frederick, Jr.; Liu, Ruiping; Hess, Hans-Juergen Ernst;
     Unterbeck, Axel
PA   Memory Pharmaceuticals Corporation, USA
SO   PCT Int. Appl., 131 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 2
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     2002US-396726P       P     20020719  <--
     2004US-0754600       A3    20040112
OS   MARPAT 137:247488
AB   Phosphodiesterase 4 (PDE4) inhibition is achieved by novel compds.,
     4-R1O-3-R2OC6H3NR3R4 (1, e.g., N-substituted aniline and diphenylamine
     analogs; e.g. 3-cyclopentyloxy-4'-ethyl-4-methoxy-N-(3-
     pyridylmethyl)diphenylamine).  In 1, R1 is C1-4 alkyl unsubstituted or
     substituted one or more times by halogen.  R2 is C1-12 alkyl, wherein
     optionally one or more -CH2CH2- groups is replaced in each case by -CH:CH-
     or -C.tplbond.C-, C3-10 cycloalkyl, C4-16 cycloalkylalkyl, C6-14 aryl ,
     arylalkyl with C6-14 aryl and C1-5 alkyl, a partially unsatd. C5-14
     carbocyclic group, a C5-10 heterocyclic group, which is saturated, partially
     saturated or unsatd., in which at least 1 ring atom is a N, O or S atom, or a
     heterocycloalkyl group with a C5-10 heterocyclic portion that is saturated,
     partially saturated or unsatd., in which at least 1 ring atom is a N, O or S
     atom, and a C1-5 alkyl portion.  R3 is H, C1-8 (preferably C1-4) alkyl, a
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L26  ANSWER 5 OF 15  HCAPLUS  COPYRIGHT 2008 ACS on STN     (Continued)
     partially unsatd. carbocycle-alkyl group with a C5-14 carbocyclic portion
     and a C1-5 alkyl portion, C7-19 arylalkyl with C6-14 aryl and C1-5 alkyl,
     or heteroarylalkyl with C5-10 heteroaryl having at least 1 ring atom N, O
     or S atom and with C1-5 alkyl.  R4 is H, C6-14 aryl or heteroaryl having 5
     to 10 ring atoms in which at least 1 ring atom is a heteroatom.  Addnl.
     restrictions on the values of R1-R4 are given in the claims.  The amnesic
     effect of MK-801 on working memory in rats (radial arm maze task) is
     reversed in a statistically significant manner by the administration of
     actual test compds. in a dose-dependent fashion [e.g.,
     3-cyclopentyloxy-4-methoxy-N-(3-pyridylmethyl)diphenylamine, ED = 2.5
     mg/kg, i.p.; p<0.01].  The amnesic effect of MK-801 on rats in a passive
     avoidance expt. is reversed in a statistically significant manner by
     actual test compds. in a dose-dependent fashion [e.g.,
     3-cyclopentyloxy-4-methoxy-N-(3-pyridylmethyl)diphenylamine, ED range =
     0.5 to 2.5 mg/kg, i.p.; and N-(3-cyclopentyloxy-4-methoxyphenyl)-N-(3-
     pyridylmethyl)-3-aminobenzoic acid, ED range = 0.1 to 2.5 mg/kg, i.p.].
     Although the methods of prepn. are not claimed, .apprx.20 example prepns.
     are included and hundreds of compds. are listed in the claims.
IT   460081-58-7P, 3-Cyclopentyloxy-4-methoxy-3'-(4-methylpiperazin-1-
     ylcarbonyl)-N-(3-pyridylmethyl)diphenylamine 460081-59-8P,
     3-Cyclopentyloxy-4-difluoromethoxy-4'-(4-methylpiperazin-1-ylcarbonyl)-N-
     (3-pyridylmethyl)diphenylamine 460081-60-1P,
     4-Methoxy-4'-(4-methylpiperazin-1-ylcarbonyl)-N-(3-pyridylmethyl)-3-(3-
     tetrahydrofuryloxy)diphenylamine
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of C-organooxy- and N-substituted aniline and diphenylamine
        analogs as phosphodiesterase 4 inhibitors useful for enhancing
        cognition)
RN   460081-58-7  HCAPLUS
CN   Piperazine, 1-[3-[[3-(cyclopentyloxy)-4-methoxyphenyl](3-
     pyridinylmethyl)amino]benzoyl]-4-methyl- (9CI)  (CA INDEX NAME)
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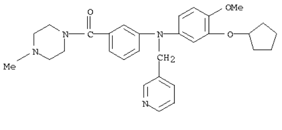

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RN   460081-59-8  HCAPLUS
CN   Piperazine, 1-[4-[[3-(cyclopentyloxy)-4-(difluoromethoxy)phenyl](3-
     pyridinylmethyl)amino]benzoyl]-4-methyl- (9CI)  (CA INDEX NAME)
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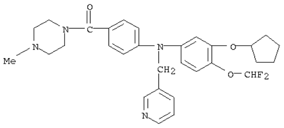

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RN   460081-60-1  HCAPLUS
CN   Piperazine, 1-[4-[[4-methoxy-3-[(tetrahydro-3-furanyl)oxy]phenyl](3-
     pyridinylmethyl)amino]benzoyl]-4-methyl- (9CI)  (CA INDEX NAME)
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L26  ANSWER 5 OF 15  HCAPLUS  COPYRIGHT 2008 ACS on STN     (Continued)
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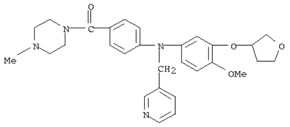

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L26  ANSWER 6 OF 15  HCAPLUS  COPYRIGHT 2008 ACS on STN
AN   2002:676007  HCAPLUS
DN   137:216945
TI   Preparation of substituted 2-(1H-indazol-6-ylamino)nicotinamides for
     treating KDR-related diseases
IN   Chen, Guoqing; Adams, Jeffrey; Bemis, Jean; Croghan, Michael; Dipietro,
     Lucian; Dominguez, Celia; Elbaum, Daniel; Germain, Julie; Huang, Qi; Kim,
     Joseph L.; Ouyang, Xiaohu; Patel, Vinod F.; Smith, Leon M.; Tasker,
     Andrew; Xi, Ning; Xu, Shimin; Yuan, Chester Chenguang; Kim, Tae-Seong
PA   Amgen Inc., USA
SO   PCT Int. Appl., 395 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 2
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             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
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     US---7105682         B2    20060912
     CA---2434178         A1    20020906   2002CA-2434178         20020111 <--
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     HU2003002719         A3    20070828
     EE-200300325         A     20031215   2003EE-0000325         20020111 <--
     JP2004527499         T     20040909   2002JP-0567920         20020111 <--
     CN---1538836         A     20041020   2002CN-0806467         20020111 <--
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     US2006194848         A1    20060831   2006US-0417329         20060502 <--
PRAI 2001US-261882P       P     20010112  <--
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OS   MARPAT 137:216945
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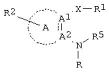

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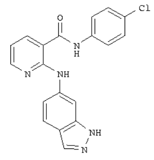

II

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AB   The title compds. [I; each of A1 and A2 = C, CH, N; A = 5-6 membered
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L26  ANSWER 6 OF 15  HCAPLUS  COPYRIGHT 2008 ACS on STN     (Continued)
     partially satd. heterocyclyl, 5-6 membered heteroaryl, 9-11 membered fused
     partially satd. heterocyclyl, etc.; X = C(:Z)N(R5a)R4; Z = O, S; R =
     (un)substituted 4-6 membered heterocyclyl, aryl, fused 9-14 membered
     bicyclic or tricyclic heterocyclyl; R1 = (un)substituted 6-10 membered
     aryl, 4-6 membered heterocyclyl, cycloalkyl, etc.; R2 = H, halo,
     cycloalkyl, etc.; R4 = a bond, alkylene, alkenylene, etc.; R5 = H, alkyl,
     (un)substituted Ph, aralkyl; R5a is not defined] which are effective for
     prophylaxis and treatment of diseases, such as angiogenesis mediated
     diseases, were prepd.  Thus, heating N-(4-chlorophenyl)-2-chloro-3-
     pyridinecarboxamide with 6-aminoindazole at 150° for 2 h afforded
     II which inhibited VEGF-stimulated HUVEC proliferation at level below 50
     nM.  Compds. I showed inhibition of KDR at doses less than 50 µM.
IT   442846-74-4P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation of substituted 2-(1H-indazol-6-ylamino)nicotinamides for
        treating KDR-related diseases)
RN   442846-74-4  HCAPLUS
CN   1-Piperazinecarboxylic acid, 4-[3-[[(2-fluoro-3-pyridinyl)carbonyl]amino]-
     5-(trifluoromethyl)benzoyl]-, 1,1-dimethylethyl ester  (CA INDEX NAME)
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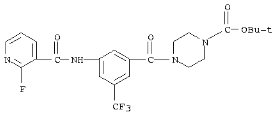

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L26  ANSWER 7 OF 15  HCAPLUS  COPYRIGHT 2008 ACS on STN
AN   2002:658116  HCAPLUS
DN   137:201332
TI   Preparation of heterocyclylalkylamine derivatives as remedies for
     angiogenesis mediated diseases
IN   Chen, Guoqing; Adams, Jeffrey; Bemis, Jean; Booker, Shon; Cai, Guolin;
     Croghan, Michael; DiPietro, Lucian; Dominguez, Celia; Elbaum, Daniel;
     Germain, Julie; Geuns-Meyer, Stephanie; Handley, Michael; Huang, Qi; Kim,
     Joseph L.; Kim, Tae-seong; Kiselyov, Alexander; Ouyang, Xiaohu; Patel,
     Vinod F.; Smith, Leon M.; Stec, Markian; Tasker, Andrew; Xi, Ning; Xu,
     Shimin; Yuan, Chester Chenguang
PA   Amgen Inc., USA
SO   PCT Int. Appl., 502 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 2
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             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
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         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
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     2001US-323764P       P     20010919  <--
     2002US-0046681       A     20020110  <--
     2002AU-0248340       A3    20020111  <--
     2002EP-0717325       A3    20020111  <--
     2002WO-US00743       W     20020111  <--
OS   MARPAT 137:201332
GI
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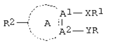
L26 ANSWER 7 OF 15 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)



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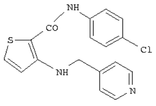


II

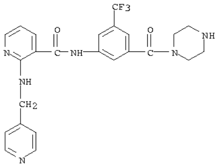
AB Title compds. [I; A1, A2 independently = C, N; A = 5-, or 6-membered partially saturated heterocyclyl, 5-, or 6-membered heterocyclyl, 9-, or 10-membered fused partially saturated heterocyclyl, 9-, 10-, or 11-membered fused heteroaryl, naphthyl, 4-, 5-, or 6-membered cycloalkenyl; X = C:ZNR3, C:ZN(R3)R4; Z = O, S; Y = N:CH, NR5(CR6R7), R8N(R5)(CR6R7), NR5(CR6R7)R8; R = 5-, or 6-membered (un)substituted heterocyclyl, 9-, 10-, 11-membered heterocyclyl; R1 = 6-10-membered (un)substituted aryl, 5-, or 6-membered (un)substituted heterocyclyl, 9-11 membered (un)substituted fused heterocyclyl, cycloalkyl, cycloalkenyl; R2 = H, halo, oxo, SH, COOH, CHO; R3 = H, alkyl, 5-, or 6-membered heterocyclyl; R4 = alkylenyl, alkenylenyl, alkynylenyl; R5 = H, alkyl, aralkyl, C6H5; R6, R7 independently = H, halo, CN, alkyl; R6R7 = cycloalkyl; R8 = alkylenyl; etc.] are prepared and are effective for prophylaxis and treatment of diseases, such as angiogenesis mediated diseases. The invention encompasses novel compds., analogs, prodrugs and pharmaceutically acceptable derivs. thereof, pharmaceutical compns. and methods for prophylaxis and treatment of diseases and other maladies or conditions involving, cancer and the like. The subject invention also relates to processes for making such compds. as well as to intermediates useful in such processes. Thus, the title compound II was prepared from Me 3-amino-2-thiophenecarboxylate, 4-chloroaniline, and 4-pyridine carboxaldehyde via coupling reaction.

IT 453561-82-5P 453563-43-4P 453563-44-5P
453565-22-5P 453565-23-6P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of heterocyclylalkylamine derivs. as remedies for angiogenesis mediated diseases)

RN 453561-82-5 HCAPLUS

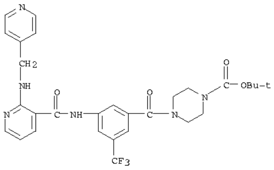
CN 3-Pyridinecarboxamide, N-[3-(1-piperazinylcarbonyl)-5-(trifluoromethyl)phenyl]-2-[(4-pyridinylmethyl)amino]- (CA INDEX NAME)

L26 ANSWER 7 OF 15 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)



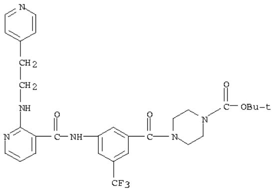
RN 453563-43-4 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[3-[[[2-[(4-pyridinylmethyl)amino]-3-pyridinyl]carbonyl]amino]-5-(trifluoromethyl)benzoyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



RN 453563-44-5 HCAPLUS

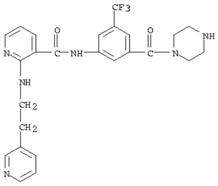
CN 1-Piperazinecarboxylic acid, 4-[3-[[[2-[[2-(4-pyridinyl)ethyl]amino]-3-pyridinyl]carbonyl]amino]-5-(trifluoromethyl)benzoyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



RN 453565-22-5 HCAPLUS

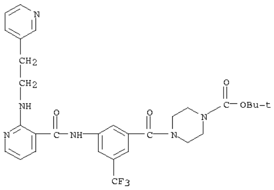
CN 3-Pyridinecarboxamide, N-[3-(1-piperazinylcarbonyl)-5-(trifluoromethyl)phenyl]-2-[[2-(3-pyridinyl)ethyl]amino]- (CA INDEX NAME)

L26 ANSWER 7 OF 15 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 453565-23-6 HCAPLUS

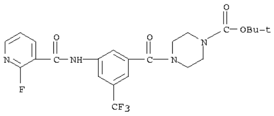
CN 1-Piperazinecarboxylic acid, 4-[3-[[[2-[[2-(3-pyridinyl)ethyl]amino]-3-pyridinyl]carbonyl]amino]-5-(trifluoromethyl)benzoyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



IT 442846-74-4P, 2-Fluoro-N-[3-((4-Boc-piperazin-1-yl)carbonyl)-5-trifluoromethylphenyl]nicotinamide
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of heterocyclylalkylamine derivs. as remedies for angiogenesis mediated diseases)

RN 442846-74-4 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[3-[[(2-fluoro-3-pyridinyl)carbonyl]amino]-5-(trifluoromethyl)benzoyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 8 OF 15 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 2002:539663 HCAPLUS

DN 137:109210

TI Preparation of substituted arylamine derivatives and methods of use as antitumor agents

IN Chen, Guoqing; Booker, Shon; Cai, Guolin; Croghan, Michael; Dipietro, Lucian; Dominguez, Celia; Elbaum, Daniel; Germain, Julie; Huang, Qi; Kim, Joseph L.; Kim, Tae-Seong; Patel, Vinod F.; Smith, Leon M.; Tasker, Andrew; Xi, Ning; Xu, Shimin; Yuan, Chester Chenguang

PA Amgen Inc., USA

SO PCT Int. Appl., 253 pp.
CODEN: PIXXD2

DT Patent

LA English

```
FAN.CNT 2
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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PI   WO2002055501         A2    20020718    2002WO-US00742         20020111 <--
     WO2002055501         A3    20021219
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, UZ, VN, YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     US2002147198         A1    20021010    2002US-0046526         20020110 <--
     CA---2434274         A1    20020718    2002CA-2434274         20020111 <--
     AU2002248339         A1    20020724    2002AU-0248339         20020111 <--
     EP---1358161         A2    20031105    2002EP-0717324         20020111 <--
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     JP2004531473         T     20041014    2002JP-0556173         20020111 <--
     MX2003PA06010        A     20030910    2003MX-PA06010         20030702 <--
PRAI 2001US-261360P       P     20010112  <--
     2001US-323686P       P     20010919  <--
     2002US-0046526       A     20020110  <--
     2002WO-US00742       W     20020111  <--
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OS MARPAT 137:109210

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

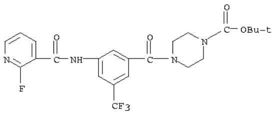
AB Title compds. I [B1 and B2 independently equal C or N, wherein B1B2 form part of 5-6 membered heteroaryl ring A; R1 = one or more substituents selected from H, halo, oxo, (un)substituted cycloalkyl, phenylalkyl, etc.; R2 = (un)substituted cycloalkyl, cycloalkenyl, 6-10 membered aryl or 5-6 membered heterocyclyl, etc.; R3 = (un)substituted aryl; R4 = H, alkyl, (un)substituted Ph or aralkyl; X1 = bond, alkylenyl, alkenylenyl and alkynylenyl, where one of the CH2 groups may be substituted with O or NH, wherein X1 is optionally substituted with OH; X2 = (un)substituted N containing linker, e.g., -NHCH2-], and there pharmaceutically acceptable derivs., are prepared and disclosed as agents effective for prophylaxis and treatment of diseases, such as angiogenesis mediated diseases. Thus, II was prepared via arylation of 1-dimethylamino-2-propyne with 3-bromo-5-trifluoromethylaniline, hydrogenation, amidation with 2-chloropyridine-3-carbonyl chloride and chloro-substitution with 4-fluorobenzylamine. Selected compds. of the invention, e.g., II, inhibited VEGF-stimulated cell proliferation at a level below 50 nM. The invention encompasses novel compds., analogs, prodrugs and pharmaceutically acceptable derivs. thereof, pharmaceutical compns. and methods for prophylaxis and treatment of diseases and other maladies or conditions involving, cancer and the like.

IT 442846-74-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of substituted aminopyridines as antitumor agents)

RN 442846-74-4 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[3-[[(2-fluoro-3-pyridinyl)carbonyl]amino]-

L26 ANSWER 8 OF 15 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)
5-(trifluoromethyl)benzoyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



L26 ANSWER 9 OF 15 HCAPLUS COPYRIGHT 2008 ACS on STN
AN 2002:107059 HCAPLUS
DN 136:151182
TI Antimicrobial biaryl compounds
IN Jefferson, Elizabeth Ann; Swayze, Eric
PA Isis Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 44 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

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     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   WO2002009648         A2    20020207    2001WO-US24067         20010801 <--
     WO2002009648         A3    20020627
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ,
             VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     US---6849660         B1    20050201    2000US-0630122         20000801 <--
     CA---2418121         A1    20020207    2001CA-2418121         20010801 <--
     AU2001080944         A5    20020213    2001AU-0080944         20010801 <--
     EP---1305028         A2    20030502    2001EP-0959380         20010801 <--
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     JP2004519421         T     20040702    2002JP-0515203         20010801 <--
PRAI 2000US-0630122       A     20000801  <--
     2001WO-US24067       W     20010801  <--
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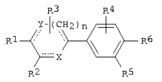
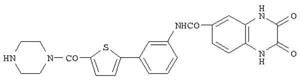
OS MARPAT 136:151182
GI



I



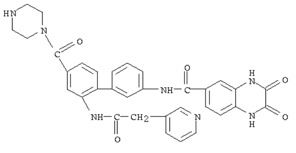
II

AB Biaryls I [X = CH, O, S, N, NH; Y = CH, N; n = 0, 1; one of R1 and R2 = (un)substituted CONRH2, COQNH2, CH2NH2, SO2NH2 and the other is H or R3; one of R5 and R6 = NHCOR7, NHSO2R7, NHS(O)R7 and the other is H, R4; Q = amino acid or peptide residue; R3 = H, halogen, (un)substituted NH2, NHCOR7; R4 = H, halogen, hydroxyl, amino, carboxyl, alkyl, alkenyl, alkynyl; R7 = H, amino, (un)substituted alkyl, alkenyl, alkynyl, 5-16 member carbocycle or heterocycle] were prepd for use as antimicrobial agents. Thus, polymer-supported piperazine was acylated with 5-bromo-2-thiophenecarboxylic acid, coupled with 3-H2NC6H4B(OH)2, and acylated with 2,3-dioxobenzopyrazine-6-carboxylic acid to give the biaryl II. In a coupled bacterial transcription-translation assay II had an IC50 of 25 μM.

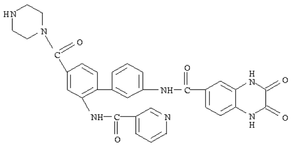
IT 395648-27-8P 395648-30-3P
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); THU

L26 ANSWER 9 OF 15 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of acylaminobiarylcarboxamides as bactericides)

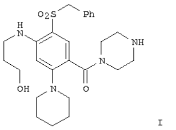
RN 395648-27-8 HCAPLUS
CN 6-Quinoxalinecarboxamide, 1,2,3,4-tetrahydro-2,3-dioxo-N-[4'-(1-piperazinylcarbonyl)-2'-[(3-pyridinylacetyl)amino][1,1'-biphenyl]-3-yl]- (9CI) (CA INDEX NAME)



RN 395648-30-3 HCAPLUS
CN 6-Quinoxalinecarboxamide, 1,2,3,4-tetrahydro-2,3-dioxo-N-[4'-(1-piperazinylcarbonyl)-2'-[(3-pyridinylcarbonyl)amino][1,1'-biphenyl]-3-yl]- (CA INDEX NAME)



L26 ANSWER 10 OF 15 HCAPLUS COPYRIGHT 2008 ACS on STN
AN 2001:689129 HCAPLUS
DN 136:53727
TI Synthesis of a new class of highly functionalized benzamides by threefold sequential nucleophilic substitution at a resin-bound polyelectrophile
AU Grimstrup, Marie; Zaragoza, Florencio
CS Novo Nordisk A/S, Maaloev, 2760, Den.
SO European Journal of Organic Chemistry (2001), (17), 3233-3246
CODEN: EJOCFK; ISSN: 1434-193X
PB Wiley-VCH Verlag GmbH
DT Journal
LA English
OS CASREACT 136:53727
GI



I

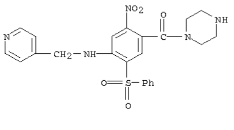
AB The authors have developed a solid-phase synthesis of a new class of highly substituted and functionalized benzamides, e.g. I. This synthesis is based on the sequential introduction of three different nucleophiles at a resin-bound 4,5-difluoro-2-nitrobenzamide. After displacement of one fluorine atom by a thiol and oxidation to a sulfone, the remaining fluorine atom and the nitro group could be substituted sequentially by two different aliphatic amines. In each of the three nucleophilic substitutions it was possible to use unprotected functionalized nucleophiles, giving fast and easy access to libraries of small organic mols. featuring polar functional groups such as hydroxy, amino, and ester groups and various heterocycles.

IT 382146-00-1P 382146-10-3P 382146-24-9P
382146-32-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(solid-phase synthesis of benzamides by threefold sequential nucleophilic substitution of difluoronitrobenzamide)

RN 382146-00-1 HCAPLUS
CN Piperazine, 1-[2-nitro-5-(phenylsulfonyl)-4-[(4-pyridinylmethyl)amino]benzoyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

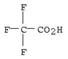
CRN 382145-99-5
CMF C23 H23 N5 O5 S



CM 2

CRN 76-05-1
CMF C2 H F3 O2

L26 ANSWER 10 OF 15 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)

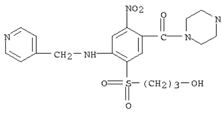


RN 382146-10-3 HCAPLUS

CN Piperazine, 1-[5-[(3-hydroxypropyl)sulfonyl]-2-nitro-4-[(4-pyridinylmethyl)amino]benzoyl]-, trifluoroacetate (salt) (9CI) (CA INDEX NAME)

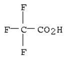
CM 1

CRN 382146-09-0
CMF C20 H25 N5 O6 S



CM 2

CRN 76-05-1
CMF C2 H F3 O2

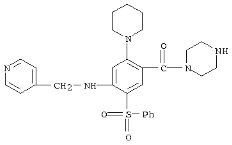


RN 382146-24-9 HCAPLUS

CN Piperazine, 1-[5-(phenylsulfonyl)-2-(1-piperidinyl)-4-[(4-pyridinylmethyl)amino]benzoyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

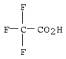
CRN 382146-23-8
CMF C28 H33 N5 O3 S



CM 2

L26 ANSWER 10 OF 15 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)

CRN 76-05-1
CMF C2 H F3 O2

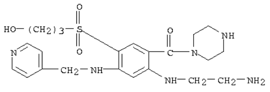


RN 382146-32-9 HCAPLUS

CN Piperazine, 1-[2-[(2-aminoethyl)amino]-5-[(3-hydroxypropyl)sulfonyl]-4-[(4-pyridinylmethyl)amino]benzoyl]-, bis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

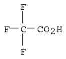
CM 1

CRN 382146-31-8
CMF C22 H32 N6 O4 S



CM 2

CRN 76-05-1
CMF C2 H F3 O2



RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 11 OF 15 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 1995:459558 HCAPLUS

DN 122:214070

TI Preparation of [4-(2-oxo-1-benzimidazolinyl)piperidino]acetanilides as retroviral protease inhibitors

IN Bender, Wofgang; Haebich, Dieter; Raddatz, Siegfried; Roeben, Wolfgang; Wild, Hanno; Hansen, Jutta; Paessens, Arnold

PA Bayer A.-G., Germany

SO Eur. Pat. Appl., 36 pp.
CODEN: EPXXDW

DT Patent

LA German

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FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
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PI   EP----628555         A1    19941214    1994EP-0108130          19940526 <--
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
     DE---4319039         A1    19941215    1993DE-4319039          19930608 <--
     JP--06345757         A     19941220    1994JP-0144046          19940603 <--
     US---5571921         A     19961105    1995US-0470372          19950606 <--
PRAI 1993DE-4319039       A     19930608  <--
     1994US-0252297       B1    19940601  <--
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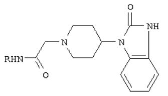
OS CASREACT 122:214070; MARPAT 122:214070

GI



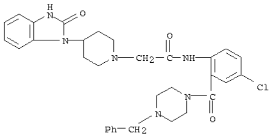
I

AB Title compds. [I; R = (un)substituted aryl] were prepared as retroviral protease inhibitors (no data). Thus, BrCH2COCl was amidated by 2,4-F2C6H3NH2 which was condensed with 4-(2-oxo-1-benzimidazolinyl)piperidine to give I (R = 2,4-F2C6H3).

IT 161918-12-3P 161918-38-3P 161918-39-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of [4-(2-oxo-1-benzimidazolinyl)piperidino]acetanilides as retroviral protease inhibitors)

RN 161918-12-3 HCAPLUS

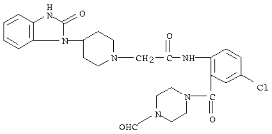
CN 1-Piperidineacetamide, N-[4-chloro-2-[[4-(phenylmethyl)-1-piperazinyl]carbonyl]phenyl]-4-(2,3-dihydro-2-oxo-1H-benzimidazol-1-yl)- (CA INDEX NAME)



RN 161918-38-3 HCAPLUS

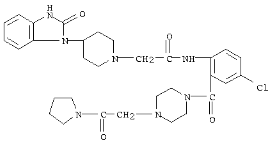
CN 1-Piperidineacetamide, N-[4-chloro-2-[(4-formyl-1-piperazinyl)carbonyl]phenyl]-4-(2,3-dihydro-2-oxo-1H-benzimidazol-1-yl)- (CA INDEX NAME)

L26 ANSWER 11 OF 15 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 161918-39-4 HCAPLUS

CN 1-Piperidineacetamide, N-[4-chloro-2-[[4-[2-oxo-2-(1-pyrrolidinyl)ethyl]-1-piperazinyl]carbonyl]phenyl]-4-(2,3-dihydro-2-oxo-1H-benzimidazol-1-yl)- (CA INDEX NAME)



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L26  ANSWER 12 OF 15  HCAPLUS  COPYRIGHT 2008 ACS on STN
AN   1993:254960  HCAPLUS
DN   118:254960
TI   Preparation of N-(aminoaroyl)-N'-(arylalkyl)piperazines as analgesics
IN   Ferrini, Pier Giorgio
PA   Ciba-Geigy A.-G., Switz.
SO   Eur. Pat. Appl., 30 pp.
     CODEN: EPXXDW
DT   Patent
LA   German
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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PI   EP----524146         A1    19930120    1992EP-0810525         19920710 <--
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, PT, SE
     US---5286728         A     19940215    1992US-0913277         19920714 <--
     AU---9220317         A     19930121    1992AU-0020317         19920715 <--
     AU----650989         B2    19940707
     CA---2074154         A1    19930120    1992CA-2074154         19920717 <--
     NO---9202853         A     19930120    1992NO-0002853         19920717 <--
     ZA---9205359         A     19930331    1992ZA-0005359         19920717 <--
     JP--05202014         A     19930810    1992JP-0190894         19920717 <--
     HU-----67047         A2    19950130    1992HU-0002359         19920717 <--
PRAI 1991CH-0002160       A     19910719  <--
     1992CH-0001340       A     19920427  <--
OS   MARPAT 118:254960
GI
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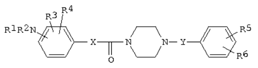
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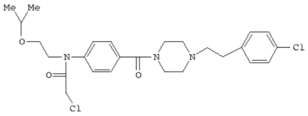
II

```
AB   Title compds. [I; R1 = H, alkyl, alkoxyalkyl, aryloxyalkyl,
     (di)alkylaminoalkyl, etc.; R2 = (substituted) alkenoyl, carbamoyl,
     carboxycarbonyl, H, alkanoyl, CO2H, alkoxy carbonyl, arylalkoxycarbonyl,
     etc.; R3, R4 = H, alkyl, halo, alkoxy, alkylthio; R5, R6 = H, alkyl,
     haloalkyl, alkoxy, alkylthio, halo, (di)(alkyl)amino, alkanoylamino; X, Y
     = bond, alkylene, alkenylene], were prepared  Thus, 1-[4-[N-(2-
     isopropoxyethyl)amino]benzoyl]-4-[2-(4-chlorophenyl)ethyl]piperazine
     (preparation given) was stirred with K2CO3 and ClCH2COCl in PhMe at 45°
     to give title compound II. HCl.  Numerous dosage formulations were prepared
     containing II or II salts.  I inhibited lipopolysaccharide-induced fever in
     rats with Eb50 = 0.05-3.5 mg/kg orally.
IT   147149-32-4P 147716-93-6P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (preparation of, as analgesic)
RN   147149-32-4  HCAPLUS
CN   1-Piperidineacetamide, N-[4-[[4-[2-(4-chlorophenyl)ethyl]-1-
     piperazinyl]carbonyl]phenyl]-N-[2-(1-methylethoxy)ethyl]-  (CA INDEX NAME)
```

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L26  ANSWER 12 OF 15  HCAPLUS  COPYRIGHT 2008 ACS on STN     (Continued)
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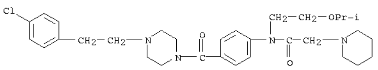
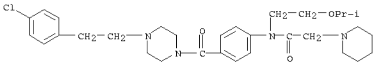


```
RN   147716-93-6  HCAPLUS
CN   1-Piperidineacetamide, N-[4-[[4-[2-(4-chlorophenyl)ethyl]-1-
     piperazinyl]carbonyl]phenyl]-N-[2-(1-methylethoxy)ethyl]-,
     (2E)-2-butenedioate (1:2)  (CA INDEX NAME)

     CM   1

     CRN  147149-32-4
     CMF  C31 H43 Cl N4 O3
```



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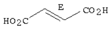
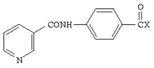
     CM   2

     CRN  110-17-8
     CMF  C4 H4 O4

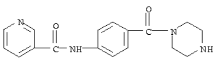
Double bond geometry as shown.
```



```
L26  ANSWER 13 OF 15  HCAPLUS  COPYRIGHT 2008 ACS on STN
AN   1993:59547  HCAPLUS
DN   118:59547
TI   Novel substituted nicotinamide derivatives:  synthesis and evaluation for
     antihypertensive activity
AU   Youssef, Khairia M.; Mohamed, Mosaad S.; El-Badry, Ossama M.
CS   Fac. Pharm., Cairo Univ., Cairo, Egypt
SO   Alexandria Journal of Pharmaceutical Sciences (1992), 6(2),
     201-4
     CODEN: AJPSES; ISSN: 1110-1792
DT   Journal
LA   English
GI
```


I

```
AB   The synthesis of two novel series of nicotinamide derivs. I (X = NRR1,
     NRR1 = pyrrolidino, morpholino, piperidino, piperazino; methylphenylamino;
     X = OCH2CONRR1) was carried out.  3-[(4-Carboxyphenyl)aminocarbonyl]pyridi
     ne (II) was converted to its acid chloride which was reacted with HNRR1 to
     give I (X = NRR1) in quant. yield.  The sodium salt of II reacted with
     ClCH2CONRR1 to give I (X = OCH2CONRR1).  I (X = NRR1, OCH2CONRR1) were
     converted to their Me iodide salts which were reduced with NaBH4 to give
     1,2,3,6-tetrahydropyridine derivs.  Eight of the new compds. were tested
     for hypotensive activity in anesthetized normotensive rabbits.
IT   145222-04-4P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation and conversion of, to Me iodide salt)
RN   145222-04-4  HCAPLUS
CN   3-Pyridinecarboxamide, N-[4-(1-piperazinylcarbonyl)phenyl]-  (CA INDEX
     NAME)
```



```
L26  ANSWER 14 OF 15  HCAPLUS  COPYRIGHT 2008 ACS on STN
AN   1990:235261  HCAPLUS
DN   112:235261
TI   Synthesis of novel 1,4-disubstituted piperazines as potential
     antihypertensive agents
AU   Botros, S.; Youssef, K. M.; Isaac, Z.
CS   Fac. Pharm., Univ. Cairo, Egypt
SO   Egyptian Journal of Pharmaceutical Sciences (1989), 30(1-4),
     419-27
     CODEN: EJPSBZ; ISSN: 0301-5068
DT   Journal
LA   English
OS   CASREACT 112:235261
GI
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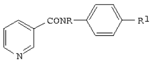
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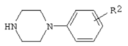
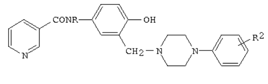
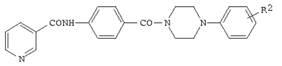
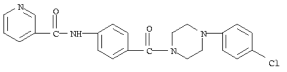

II


III


IV

```
AB   Nicotinic acid is treated with SOCl2 followed by 4-HNRC6H4R1 (R = Me, H,
     R1 = OH; R = H, R1 = CO2H) to give amides I.  I (R1 = OH) is
     aminomethylated under Mannich conditions with arylpiperazines II (R2 = 2-,
     3-Me, 4-Cl, H) to give nicotinoylaminobenzyl piperazines III.  I (R1 =
     CO2H) is amidated with SOCl2 and II to give nicotinoylaminobenzoylpiperazi
     nes IV.  III and IV (R2 = 4-Cl, 4-Br) were screened for antihypertensive
     activity.
IT   127222-58-6P 127222-59-7P 127222-62-2P
     127222-63-3P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation and antihypotensive activity of)
RN   127222-58-6  HCAPLUS
CN   3-Pyridinecarboxamide, N-[4-[[4-(4-chlorophenyl)-1-
     piperazinyl]carbonyl]phenyl]-  (CA INDEX NAME)
```



```
RN   127222-59-7  HCAPLUS
CN   3-Pyridinecarboxamide, N-[4-[[4-(4-bromophenyl)-1-
     piperazinyl]carbonyl]phenyl]-  (CA INDEX NAME)
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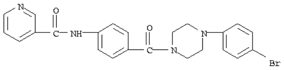
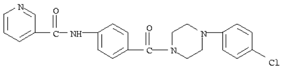
L26 ANSWER 14 OF 15 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)

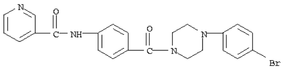


RN 127222-62-2 HCAPLUS
CN 3-Pyridinecarboxamide, N-[4-[[4-(4-chlorophenyl)-1-piperazinyl]carbonyl]phenyl]-, hydrochloride (9CI) (CA INDEX NAME)



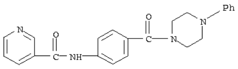
●x HCl

RN 127222-63-3 HCAPLUS
CN 3-Pyridinecarboxamide, N-[4-[[4-(4-bromophenyl)-1-piperazinyl]carbonyl]phenyl]-, hydrochloride (9CI) (CA INDEX NAME)



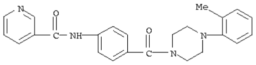
●x HCl

IT 127222-57-5P 127222-60-0P 127222-61-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 127222-57-5 HCAPLUS
CN 3-Pyridinecarboxamide, N-[4-[(4-phenyl-1-piperazinyl)carbonyl]phenyl]- (CA INDEX NAME)

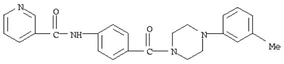


RN 127222-60-0 HCAPLUS
CN 3-Pyridinecarboxamide, N-[4-[[4-(2-methylphenyl)-1-piperazinyl]carbonyl]phenyl]- (CA INDEX NAME)

L26 ANSWER 14 OF 15 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 127222-61-1 HCAPLUS
CN 3-Pyridinecarboxamide, N-[4-[[4-(3-methylphenyl)-1-piperazinyl]carbonyl]phenyl]- (CA INDEX NAME)



L26 ANSWER 15 OF 15 HCAPLUS COPYRIGHT 2008 ACS on STN
AN 1972:462022 HCAPLUS
DN 77:62022
OREF 77:10267a,10270a
TI 1-(2-Hydroxy-5-chlorobenzoyl)piperazine derivatives
IN Brisson, Henri; Vrancea, Serge
PA Laboratoires Biosedra
SO Ger. Offen., 9 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

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     PATENT NO.          KIND   DATE       APPLICATION NO.        DATE
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PI   DE---2155857         A     19720518   1971DE-2155857         19711110 <--
     BE----774447         A1    19720214   1971BE-0109738         19711025 <--
PRAI 1970GB-0053695       A     19701111  <--
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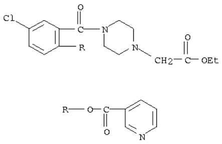
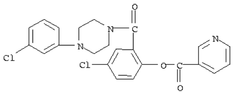
GI For diagram(s), see printed CA Issue.
AB Twelve title compds. [I; R = H or 3-pyridylcarbonyl; R1 = Me, CH2CH(OH)Me, CH2CO2Et, m-ClC6H4, 2,5-Me2C6H3, 5,2-Cl(HO)C6H3CO, CH2CONH2, or 2-(3-pyridylcarbonyloxy)propyl], useful as antiinflammatory and analgesic agents, were prepared Thus, refluxing 242 g Et 2-(1-piperazinyl)acetate and 264 g 5,2-Cl(HO)C6H3COCl in pyridine gave 320 g I (R = H, R1 = CH2CO2Et) (II). Heating 117 g II and 114.8 g nicotinic anhydride 2 hr on an oil bath (145-60°) gave 115 g I (R = 3-pyridylcarbonyl, R1 = CH2CO2Et). Refluxing 29 g I (R = R1 = H) and 70 g propylene oxide 30 min in MeOH gave 23 g I (R = H, R1 = CH2CHMeOH).
IT 37133-68-9P 37133-69-0P 37133-82-7P
37133-83-8P 37133-84-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 37133-68-9 HCAPLUS
CN 1-Piperazineacetic acid, 4-[5-chloro-2-[(3-pyridinylcarbonyl)oxy]benzoyl]-, ethyl ester (CA INDEX NAME)

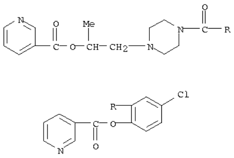


RN 37133-69-0 HCAPLUS
CN 3-Pyridinecarboxylic acid, 4-chloro-2-[[4-(3-chlorophenyl)-1-piperazinyl]carbonyl]phenyl ester (CA INDEX NAME)



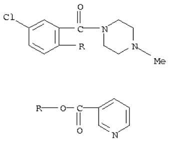
RN 37133-82-7 HCAPLUS
CN 3-Pyridinecarboxylic acid, 2-[4-[5-chloro-2-[(3-pyridinylcarbonyl)oxy]benzoyl]-1-piperazinyl]-1-methylethyl ester, hydrochloride (9CI) (CA INDEX NAME)

L26 ANSWER 15 OF 15 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)

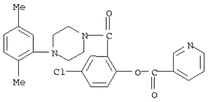


●x HCl

RN 37133-83-8 HCAPLUS
CN 3-Pyridinecarboxylic acid, 4-chloro-2-[4-(4-methyl-1-piperazinyl)carbonyl]phenyl ester (9CI) (CA INDEX NAME)



RN 37133-84-9 HCAPLUS
CN 3-Pyridinecarboxylic acid, 4-chloro-2-[[4-(2,5-dimethylphenyl)-1-piperazinyl]carbonyl]phenyl ester (CA INDEX NAME)



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                E WO2001-US6885/AP,PRN
L1            1 E3-4

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     FILE 'HCAPLUS' ENTERED AT 13:26:29 ON 13 FEB 2008
L2              TRA L1 1- RN :      462 TERMS

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L3          462 SEA L2
L4          210 L3 AND NC2NC2/ES
L5            6 L4 AND NC5/ES

     FILE 'HCAPLUS' ENTERED AT 14:02:25 ON 13 FEB 2008
L6            2 WO1999-EP5744/AP,PRN

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L7              TRA L6 1- RN :      427 TERMS

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L8          427 SEA L7
L9            0 L8 AND (NC2NC2 AND NC5)/ES

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L10           1 US20060052597/PN

     FILE 'REGISTRY' ENTERED AT 14:21:19 ON 13 FEB 2008

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L11             TRA L10 1- RN :      229 TERMS

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L12         229 SEA L11
L13         201 L12 AND NC5/ES
L14         142 L13 AND NC2NC2/ES
L15         142 L14 AND 46.150.18/RID
L16         142 L15 AND O/ELS
L17             STR
L18           0 L17
L19      107285 C6/ES AND (NC2NC2 AND NC5)/ES
L20           3 L17 SAM SUB=L19
L21         345 L17 FULL SUB=L19
                SAV TEM J371C1/A L21
L22         114 L21 AND L12
L23         231 L21 NOT L22

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L25          23 L23
L26          15 L23 AND (PD<=20021022 OR AD<=20021022 OR PRD<=20021022)
                SEL HIT RN

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L28           1 E3
L29           6 46.156.1/RID AND L27

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     FILE 'HCAOLD' ENTERED AT 14:47:59 ON 13 FEB 2008
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L32           8 L25 NOT L26
                SEL HIT RN L32

     FILE 'REGISTRY' ENTERED AT 14:49:00 ON 13 FEB 2008
L33          26 E1-26
L34          23 L33 AND 46.156.1/RID

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